

**SEARCH REQUEST FORM**

Scientific and Technical Information Center

Requester's Full Name: HARDEE Examiner #: \_\_\_\_\_ Date: 2/08  
 Art Unit: 1751 Phone Number 305-5589 Serial Number: 09/545,868  
 Mail Box and Bldg/Room Location: 9B36 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

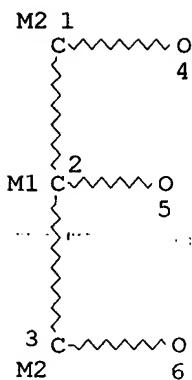
Whatever you can find on the  
attached. Thanks

95/23204

<b>STAFF USE ONLY</b>		<b>Type of Search</b>	<b>Vendors and cost where applicable</b>
Searcher: <u>ZD&amp;</u>	NA Sequence (#)	STN	_____
Searcher Phone #: <u>X-4139</u>	AA Sequence (#)	Dialog	_____
Searcher Location: <u>SL 1700</u>	Structure (#)	Questel/Orbit	_____
Date Searcher Picked Up: _____	Bibliographic	Dr.Link	_____
Date Completed: <u>2-9-01</u>	Litigation	Lexis/Nexis	_____
Searcher Prep & Review Time: <u>75</u>	Fulltext	Sequence Systems	_____
Clerical Prep Time: <u>10</u>	Patent Family	WWW/Internet	_____
Online Time: <u>35</u>	Other	Other (specify)	_____

L9  
L12

SCR 1838  
STR



NODE ATTRIBUTES:

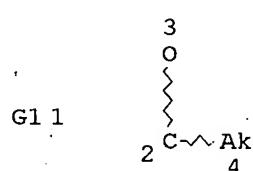
HCOUNT	IS M2	AT	1
HCOUNT	IS M1	AT	2
HCOUNT	IS M2	AT	3
NSPEC	IS C	AT	1
NSPEC	IS C	AT	2
NSPEC	IS C	AT	3
NSPEC	IS C	AT	4
NSPEC	IS C	AT	5
NSPEC	IS C	AT	6
DEFAULT MLEVEL IS ATOM			
MLEVEL IS CLASS AT 1 2 3 4 5 6			
DEFAULT ECLEVEL IS LIMITED			

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

L15 STR  
H 5



VAR G1=5/2

NODE ATTRIBUTES:

NSPEC	IS C	AT	1
NSPEC	IS C	AT	2
NSPEC	IS C	AT	3
NSPEC	IS C	AT	4
DEFAULT MLEVEL IS ATOM			
MLEVEL IS CLASS AT 2 3 4 5			
DEFAULT ECLEVEL IS LIMITED			

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE

L17 32587 SEA FILE=REGISTRY SSS FUL L12 AND L15 NOT L9  
L19 99761 SEA FILE=HCAPLUS ABB=ON PLU=ON L17  
L20 47758 SEA FILE=HCAPLUS ABB=ON PLU=ON (SURFACE ACTIVE AGENTS AND  
DETERGENTS)/CC

L21 1888 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND L19  
L33 827 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 AND (GLYCERID? OR  
TRIGLYCERID? OR GLYCEROL? OR MONOGLYCER? OR DIGLYCER?)/IT  
L34 243 SEA FILE=HCAPLUS ABB=ON PLU=ON (FATTY(3A)ACID)/IT AND L33  
L35 24 SEA FILE=HCAPLUS ABB=ON PLU=ON (BATH? OR DISH? OR WASH? OR  
HAIR)/IT AND L34

ge 1

L35 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2001 ACS

AN 2000:741057 HCAPLUS

DN 133:311153

TI Composition comprising a mixture of alkoxylated mono-, di- and triglycerides and glycerol and detergent composition therefrom

IN Bermejo, Oses, Maria Jose; Mundo, Blanch, Miquel; Siscart, Laguna, Nuria; Castan, Barberan, Pilar; Vilaret, Ferrer, Josep

PA Kao Corporation, S.A., Spain

SO Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C11D001-74

CC 46-2 (Surface Active Agents and Detergents)

FAN:CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1045021	A1	20001018	EP 1999-106233	19990413
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

OS MARPAT 133:311153

AB Compns. comprising a mixt. of alkoxylated mono-, di-, and triglycerides and glycerin of the following formula are disclosed: R' representing H or CH<sub>3</sub>, and each of m, n, and l independently representing a no. from 0 to 4, the sum of m, n and l being in the range of from 1 to 4, each of B<sub>1</sub>, B<sub>2</sub>, and B<sub>3</sub> representing H or wherein R represents an alkyl or alkenyl group having 6 to 22 carbon atoms.; and the wt. ratio of triglyceride/diglyceride/monoglyceride being 46 to 90/9 to 35/1 to 15. Also disclosed are methods for the prepn. of these compns. and detergent products comprising these compns..

ST ethoxylated propoxylated glyceride glycerol transesterification prepn  
detergent compn

IT Fatty acids, reactions

RL: RCT (Reactant)  
(coco, Me esters; compn. comprising a mixt. of alkoxylated mono-, di- and triglycerides and glycerol and detergent compn.  
therefrom)

IT Glycerides, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(coco, ethoxylated; compn. comprising a mixt. of alkoxylated mono-, di- and triglycerides and glycerol and detergent compn.  
therefrom)

IT Fatty acids, reactions

Glycerides, reactions  
RL: RCT (Reactant)  
(coco; compn. comprising a mixt. of alkoxylated mono-, di- and triglycerides and glycerol and detergent compn.  
therefrom)

IT Shampoos

(compn. comprising a mixt. of alkoxylated mono-, di- and triglycerides and glycerol and detergent compn.  
therefrom)

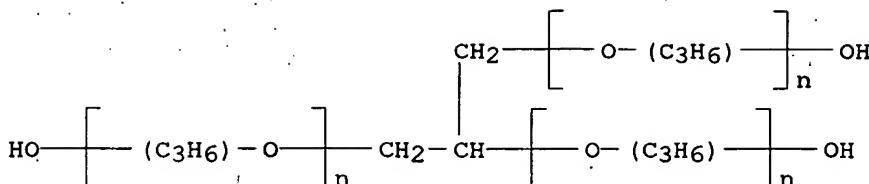
IT Glycerides, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(compn. comprising a mixt. of alkoxylated mono-, di- and triglycerides and glycerol and detergent compn.  
therefrom)

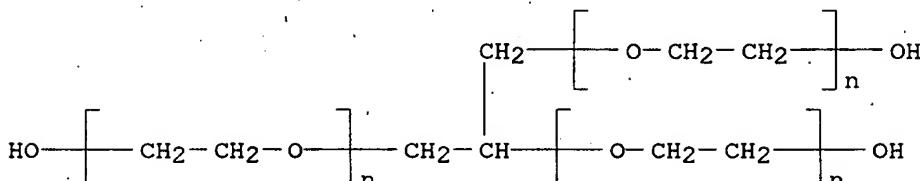
IT Hair preparations

(conditioners; compn. comprising a mixt. of alkoxylated mono-, di- and triglycerides and glycerol and detergent compn.)

- therefrom)
- IT Shampoos  
(conditioning; compn. comprising a mixt. of alkoxylated mono-, di- and **triglycerides** and **glycerol** and detergent compn.  
therefrom)
- IT Detergents  
(**dishwashing**; compn. comprising a mixt. of alkoxylated mono-, di- and **triglycerides** and **glycerol** and detergent compn.  
therefrom)
- IT Fats and **Glyceridic** oils, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(ethoxylated; compn. comprising a mixt. of alkoxylated mono-, di- and **triglycerides** and **glycerol** and detergent compn.  
therefrom)
- IT Bath preparations  
(gels; compn. comprising a mixt. of alkoxylated mono-, di- and **triglycerides** and **glycerol** and detergent compn.  
therefrom)
- IT **Glycerides**, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(palm kernel-oil, ethoxylated; compn. comprising a mixt. of alkoxylated mono-, di- and **triglycerides** and **glycerol** and detergent compn. therefrom)
- IT **Fatty acids**, reactions  
RL: RCT (Reactant)  
(palm-oil, Me esters; compn. comprising a mixt. of alkoxylated mono-, di- and **triglycerides** and **glycerol** and detergent compn.  
therefrom)
- IT **Fatty acids**, reactions  
**Glycerides**, reactions  
RL: RCT (Reactant)  
(palm-oil; compn. comprising a mixt. of alkoxylated mono-, di- and **triglycerides** and **glycerol** and detergent compn.  
therefrom)
- IT 25791-96-2DP, Polypropylene oxide, **glycerol** ether (3:1),  
**fatty acid esters** 31694-55-0DP, **fatty acid esters**  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(compn. comprising a mixt. of alkoxylated mono-, di- and **triglycerides** and **glycerol** and detergent compn.  
therefrom)
- IT 56-81-5, **Glycerol**, uses  
RL: RCT (Reactant); TEM (Technical or engineered material use); USES (Uses)  
(compn. comprising a mixt. of alkoxylated mono-, di- and **triglycerides** and **glycerol** and detergent compn.  
therefrom)
- RE.CNT 3
- RE
- (1) Colgate Palmolive Co; WO 9816605 A 1998 HCPLUS
- (2) Kao Corp Sa; EP 0579887 A 1994 HCPLUS
- (3) Kao Corp Sa; EP 0586323 A 1994 HCPLUS
- IT 25791-96-2DP, Polypropylene oxide, **glycerol** ether (3:1),  
**fatty acid esters** 31694-55-0DP, **fatty acid esters**  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(compn. comprising a mixt. of alkoxylated mono-, di- and **triglycerides** and **glycerol** and detergent compn.  
therefrom)
- RN 25791-96-2 HCPLUS
- CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)

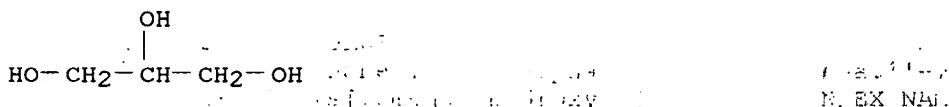


RN 31694-55-0 HCPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''1,2,3-propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT 56-81-5, Glycerol, uses  
 RL: RCT (Reactant); TEM (Technical or engineered material use); USES (Uses)  
 (compr. comprising a mixt. of alkoxylated mono-, di- and triglycerides and glycerol and detergent compn.: therefrom)

RN 56-81-5 HCPLUS  
 CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L35 ANSWER 2 OF 24 HCPLUS COPYRIGHT 2001 ACS  
 AN 2000:389116 HCPLUS  
 DN 133:32118  
 TI Drying and finishing agent for plastic tableware in automatic dishwashers  
 IN Hamamichi, Yoshiko; Maruyama, Shinji  
 PA T-Poll K. K.degree., Japan  
 SO Jpn. Kokai Tokkyo Koho, 19 pp.  
 CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C11D007-60

ICS B01D012-00; C11D007-26

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 2000160195 A2 20000613 JP 1998-333263 19981124

AB The agent suppressing the formation of water spots on plastic tableware comprises (A) esters of polyglycerols contg. >50% single polyglycerol with degree of polymn. n (n = 3-5) and C<sub>2n</sub>-C<sub>2n+4</sub> fatty acids and (B) esters of sorbitan, sorbitol and/or sorbite and C<sub>8</sub>-12 fatty acids. A compn. contained polyglycerol monocaprylates (triglycerol ester content 60%) 15, sorbitan monocaprylate 15, propylene glycol 17, EtOH 30, and water 23 g, showing low foaming and good spot suppression.

ST drying finishing agent plastic tableware dishwasher; polyglycerol caprylate, drying agent tableware dishwasher

IT, Detergents  
 (dishwashing; fatty acid ester-based  
 drying and finishing agent for plastic tableware in automatic  
 dishwashers)

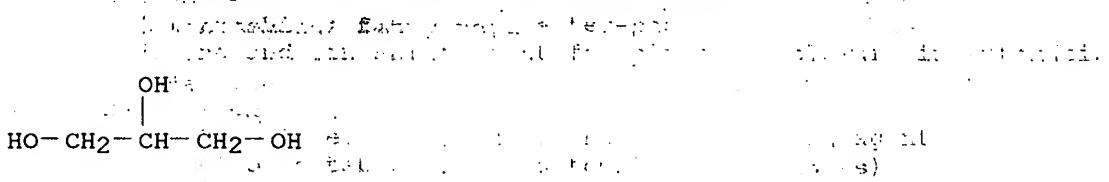
IT, Drying agents  
 (fatty acid ester-based drying and finishing agent  
 for plastic tableware in automatic dishwashers)

IT, Household furnishings  
 (tableware; fatty acid ester-based drying and  
 finishing agent for plastic tableware in automatic dishwashers  
 )

IT, 56-81-5D, Glycerol, polymers, fatty  
 acid ester 1338-39-2, Sorbitan monolaurate 39438-11-4,  
 Sorbitan monodecanoate 51033-28-4 51033-30-8, Triglycerol monocaprate  
 60177-36-8, Sorbitan monocaprylate 123609-89-2 128738-83-0  
 146599-33-9 205924-65-8 273380-01-1 273380-02-2  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (fatty acid ester-based drying and finishing agent  
 for plastic tableware in automatic dishwashers)

IT, 56-81-5D, Glycerol, polymers, fatty  
 acid ester  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (fatty acid ester-based drying and finishing agent  
 for plastic tableware in automatic dishwashers)

RN 56-81-5 HCAPLUS  
 CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L35 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2001 ACS  
 AN 2000:43524 HCAPLUS  
 DN 132:94990  
 TI Drying compositions for automatic tableware washers  
 IN Yamamoto, Nobuo  
 PA C and G K. K., Japan  
 SO Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C11D017-00  
 ICS C11D001-74; C11D003-20; C11D003-43  
 CC 46-4 (Surface Active Agents and  
 Detergents)

FAN.CNT 1  
 PATENT NO. KIND DATE APPLICATION NO. DATE  
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 PI JP 2000017295 A2 20000118 JP 1998-182141 19980629  
 JP 2962476 B2 19991012  
 JP 2962476 B1 19991012

AB The title compns. comprise (a) 6-40% polyol fatty acid esters with HLB  
 3-10 (e.g., propylene glycol oleate, propylene glycol myristate, sorbitol  
 oleate, sorbitol laurate, glycerol oleate), (b) 0.1-15% gluconic acid  
 and/or its salts (e.g., K gluconate, Na gluconate), and (c) water,  
 ethanol, propylene glycol, glycerol, and/or dipropylene glycol.  
 ST automatic tableware washer drying compn; polyol fatty ester dishwasher  
 drying compn; propylene glycol fatty ester dishwasher drying compn;  
 sorbitol fatty ester dishwasher drying compn; glycerol fatty ester  
 dishwasher drying compn; ethanol polyol fatty ester dishwasher drying  
 compn

IT Dishwashing  
 (automatic devices for; drying compns. for automatic tableware  
 washers)

IT, Drying agents  
 (drying compns. for automatic tableware washers)

IT Glycols, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)  
 (drying compns. for automatic tableware washers)

IT Fatty acids, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)  
 (esters; drying compns. for automatic tableware washers)

IT Esters, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)  
 (fatty; drying compns. for automatic tableware washers)

IT 56-81-5, Glycerol, uses 57-55-6, Propylene glycol,  
 uses 64-17-5, Ethanol, uses 299-27-4, Potassium gluconate 526-95-4,  
 Gluconic acid 527-07-1, Sodium gluconate 1330-80-9, Propylene glycol  
 monooleate 25265-71-8, Dipropylene glycol 25496-72-4,  
**Glycerol oleate 26402-22-2**, Decanoic acid, monoester  
 with 1,2,3-propanetriol 27215-38-9 29059-24-3, Propylene  
 glycol myristate 53637-07-3, Sorbitol laurate 55838-97-6, Sorbitol  
 oleate 108175-14-0, D-Glucitol, decanoate  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)

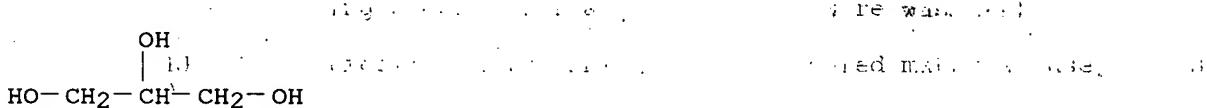
(drying compns. for automatic tableware washers)

IT 56-81-5, Glycerol, uses 25496-72-4,  
**Glycerol oleate 26402-22-2**, Decanoic acid, monoester  
 with 1,2,3-propanetriol 27215-38-9  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)

(drying compns. for automatic tableware washers)

RN 56-81-5 HCPLUS

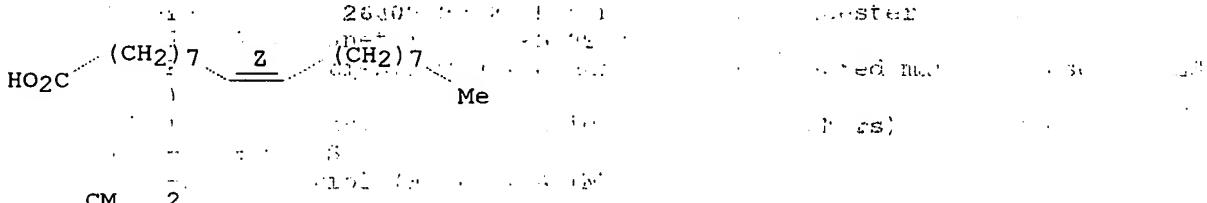
CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



RN 25496-72-4 HCPLUS  
 CN 9-Octadecenoic acid (9Z)-, monoester with 1,2,3-propanetriol (9CI) (CA  
 INDEX NAME)

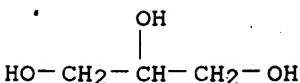
CM 1  
 CRN 112-80-1  
 CMF C18 H34 O2  
 CDES 2:Z

Double bond geometry as shown.



CRN 56-81-5  
 CMF C3 H8 O3

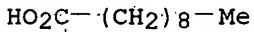




RN 26402-22-2 HCAPLUS  
CN Decanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)

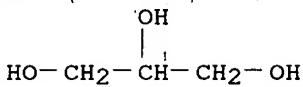
CM 1

CRN 334-48-5  
CMF C10 H20 O2



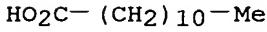
CM 2

CRN 56-81-5  
CMF C3 H8 O3



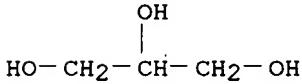
RN 27215-38-9 HCAPLUS  
CN Dodecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)  
CM 1

CRN 143-07-7  
CMF C12 H24 O2



CM 2

CRN 56-81-5  
CMF C3 H8 O3



L35 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2001 ACS

AN 1999:3449 HCAPLUS

DN 130:68211

TI Mild, biodegradable alkyl polyglycoside-free surfactant compositions containing a hydrophobically modified polyaspartic acid derivative

IN Gruning, Burghard; Simpelkamp, Jorg; Weitemeyer, Christian

PA Th. Goldschmidt A.-G., Germany

SO Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DT Patent

LA German

IC ICM C11D003-37

ICS A61K007-06; A61K007-16; A61K007-48

CC. 46-6 (Surface Active Agents and  
Detergents)

Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 884380	A2	19981216	EP 1998-109729	19980528
	EP 884380	A3	19991117		
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
PRAI	DE 1997-19724590		19970611		
AB	Mild surfactant compns., useful for cleaning and as cosmetics, contg. hydrophobically modified polyaspartic acid deriv. exhibit better biodegradability than similar compds. contg. alkyl polyglycosides.				
ST	biodegradable surfactant compn hydrophobic polyaspartic acid deriv; cosmetic biodegradable hydrophobic polyaspartic acid deriv; detergent biodegradable hydrophobic polyaspartic acid deriv; alkyl polyglycoside replacement biodegradable surfactant compn				
IT	Detergents (biodegradable; mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv. for detergents)				
IT	Bath preparations (bubble; mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv. for bubble baths)				
IT	Shaving preparations (creams; mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv. for shaving creams)				
IT	Coco fatty acids RL: PRP. (Properties); TEM (Technical or engineered material use); USES (Uses) (esters, with polyethylene glycol glycerol ether; mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv.)				
IT	Amphoteric surfactants				
	Anionic surfactants				
	Biodegradable materials				
	Cationic surfactants				
	Nonionic surfactants				
	Zwitterionic surfactants (mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv.)				
IT	Cosmetics (mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv. for cosmetics)				
IT	Dishwashing detergents (mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv. for dishwashing detergents)				
IT	Liquid soaps RL: MSC (Miscellaneous) (mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv. for liq. soaps)				
IT	Mouthwashes (mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv. for mouth rinses)				
IT	Shampoos (mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv. for shampoos)				
IT	Shaving preparations (mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv. for shaving lotions)				
IT	Dentifrices (mild, biodegradable alkyl polyglycoside-free surfactant compns. contg.				

a hydrophobically modified polyaspartic acid deriv. for tooth paste)  
IT 107-43-7D, coco amidopropyl deriv.  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)  
(cocoamidopropyl betaines; mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv.)

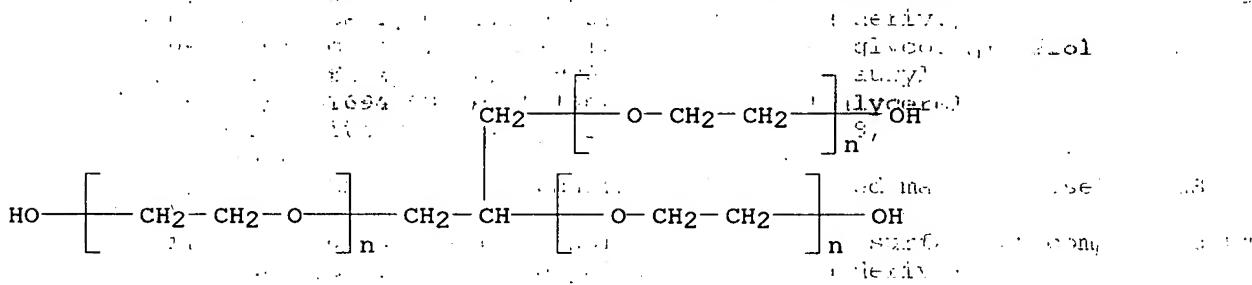
IT 31586-29-5DP, Polysuccinimide, ring-opened, decanol esters, hydrolyzed  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv.)

IT 112-80-1D, Oleic acid, esters with polyethylene glycol glycerol ether and coco fatty acids 9004-82-4, Sodium lauryl ether sulfate 31694-55-0D, Polyethylene glycol glycerol ether, esters with coco fatty acids 156511-15-8, Tego Betain F50  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv.)

IT 218166-41-7P  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv. for liq. detergents)

IT 31694-55-0D, Polyethylene glycol glycerol ether, esters with coco fatty acids  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(mild, biodegradable alkyl polyglycoside-free surfactant compns. contg. a hydrophobically modified polyaspartic acid deriv.)

RN 31694-55-0 HCPLUS  
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha''-(1,2,3-propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)

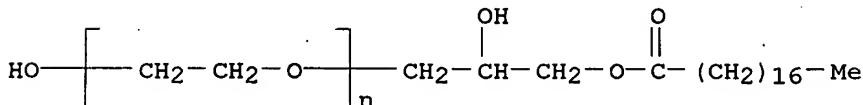


L35 ANSWER 5 OF 24 HCPLUS COPYRIGHT 2001 ACS  
AN 1999:3426 HCPLUS  
DN 130:83238  
TI Mild surfactant compositions with copolymeric polyaspartic acid derivatives for cosmetics or cleaning  
IN Gruning, Burghard; Rau, Harald; Simpelkamp, Jorg; Weitemeyer, Christian  
PA Th. Goldschmidt A.-G., Germany  
SO Eur. Pat. Appl., 14 pp.  
CODEN: EPXXDW  
DT Patent  
LA German  
IC ICM C08G073-10  
ICS C11D003-37; A61K007-06; A61K007-16; A61K007-48  
CC 46-6 (Surface Active Agents and Detergents)  
Section cross-reference(s): 62  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI. EP 884344 A2 19981216 EP 1998-109730 19980528  
 EP 884344 A3 19991117  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO  
 PRAI DE 1997-19724589 19970611  
**AB** The compns. comprise an essentially linear aspartic acid copolymer and .gtoreq.1 surfactant, or .gtoreq.2 surfactants if .gtoreq.1 of them is anionic. The aspartic acid copolymers are derived from .gtoreq.1 .alpha., .beta.-unsatd. dicarboxylic acid (esp. maleic acid) monoester and NH3 or the salt thereof. Thus, heating a 1:3 mixt. of monodecyl maleate and monoethyl maleate with NH3 in iso-BuCOMe for 4-6 h at 120-140.degree. under reduced pressure gave an aspartic acid copolymer in which 70% of the units were free acid, 20% the decyl ester, and 5% the Et ester. Formulations incorporating this and similar copolymers are given for liq. soap, soap bars, toothpaste, etc.  
**ST** polyaspartic acid ester surfactant formulation  
**IT** Ethoxylated hydrogenated castor oil  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (Tagat R 40; mild surfactant compns. for cosmetics or cleaning contg. poly(aspartic acid) esters and)  
**IT** Glycerides, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (coco, ethoxylated, Tegosoft GC; mild surfactant compns. for cosmetics or cleaning contg. poly(aspartic acid) esters and)  
**IT** Coco fatty acids  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (esters with sucrose, Tegosoft LSE 65K; mild surfactant compns. for cosmetics or cleaning contg. poly(aspartic acid) esters and)  
**IT** Dentifrices  
**IT** Dishwashing detergents  
 Mouthwashes  
 Shampoos  
 Surfactants  
 (mild surfactant compns. for cosmetics or cleaning contg. poly(aspartic acid) esters)  
**IT** 5303-24-2, Octyl laurate  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (Tegosoft OL; mild surfactant compns. for cosmetics or cleaning contg. poly(aspartic acid) esters and)  
**IT** 217961-69-8P, Poly(aspartic acid) decyl ethyl ester 217961-78-9P,  
 Poly(aspartic acid) dodecyl ethyl ester 217961-84-7P, Poly(aspartic acid) cetyl ethyl ester 217961-88-1P, Poly(aspartic acid) ethyl stearyl ester  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (mild surfactant compns. for cosmetics or cleaning)  
**IT** 8043-29-6, Tegin M 9004-82-4, Texapon N 28 9005-64-5, G 4280  
**51852-65-4**, Tagat S 58450-52-5 68822-59-3, Elfan OS 46  
 156511-15-8, TEGO Betain F 50 172521-05-0, Datamuls 43 178463-54-2,  
 Tego Glucosid 810 178463-55-3, TEGO Glucosid 1216 188735-42-4, Tego Betain CKD 200217-18-1, Antil 171 218433-36-4, Antil HS 60  
 218433-43-3, Tego Pearl N 100 218433-55-7, Tego Glycinat 818  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (mild surfactant compns. for cosmetics or cleaning contg. poly(aspartic acid) esters and)  
**IT** 217958-17-3P, Monodecyl maleate-monoethyl maleate-ammonia copolymer  
 217958-20-8P, Monododecyl maleate-monoethyl maleate-ammonia copolymer  
 217958-22-0P, Monocetyl maleate-monoethyl maleate-ammonia copolymer  
 217958-24-2P, Monoethyl maleate-monostearyl maleate-ammonia copolymer  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (of poly(aspartic acid) structure; mild surfactant compns. for cosmetics or cleaning)  
**IT** **51852-65-4**, Tagat S  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (mild surfactant compns. for cosmetics or cleaning contg. poly(aspartic acid) esters and)

RN 51852-65-4 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-hydroxy-3-[(1-oxooctadecyl)oxy]propyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)



L35 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2001 ACS

AN 1998:450745 HCAPLUS

DN 129:190779

TI Mild detergent compositions containing amide ether carboxylic acid salts and glyceride alkoxylates

IN Shoji, Kenso; Ide, Kazutoshi

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C11D001-06

ICS C11D001-722; C11D003-20

CC 46-6. (Surface Active Agents and Detergents)

FAN.CNT.1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 10183168 A2 19980714 JP 1996-349860 19961227

AB The title compns. contain (A) amide ether carboxylic acid salts

RC(:O)NA(EO)n(PO)mCH2CO2M [I; R = C5-21 alkyl, alkenyl; n + m = 1-20; m, n = 0-20; EO = oxyethylene; PO = oxypropylene; A = (EO)<sub>k</sub>(PO)<sub>j</sub>CH2CO2M, (EO)<sub>k</sub>(PO)<sub>j</sub>H, H, C1-3 alkyl; k + j = 1-20; k, j = 0-20; M = alkali metal, alk. earth metal, amine, alkanolamine], (B) amide ethers RC(:O)NB(EO)n(PO)mH [II; B = (EO)<sub>k</sub>(PO)<sub>j</sub>H, H, C1-3 alkyl], and (C) glyceride alkoxylates, [CH2O(AO)<sub>m</sub>X1][CHO(AO)<sub>n</sub>X2][CH2O(AO)<sub>p</sub>X3] [III; X1-X3 = C(:O)R1, H; R1 = C7-21 alkyl, alkenyl; A = C2-4 alkylene; av. mol. no. of alkylene oxide 0-10], where the content of III (X1 = X2 = X3 = H) is 0-4%, III (1 of X1-X3 .noteq. H) 0-40%, III (2 of X1-X3 .noteq. H) 0-40%, and III (3 of X1-X3 .noteq. H) .gtoreq.50%, at wt. ratio A/B 0.1-100 and C content 0.01-40%. Thus, a compn. contg. I (R = C11H23, n = 2, m = 0, A = H, M = Na), II (R = C11H23, n = 1, m = 0, B = H), and a glyceride alkoxylate obtained from soybean oil and ethylene oxide showed high detergency and foamability and was mild to skin.

ST detergent amide ether carboxylate salt; glyceride alkoxylate dishwashing detergent; soybean ethoxylated dishwashing detergent

IT Glycerides, uses

RL: MOA (Modifier or additive use); USES (Uses)  
 (alkoxylates; mild detergents contg. polyoxyalkyleneamide carboxylic acid salts and glyceride alkoxylates)

IT Polyoxyalkylenes, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
 (amides, carboxylic acid salts; mild detergents contg. polyoxyalkyleneamide carboxylic acid salts and glyceride alkoxylates)

IT Detergents

Dishwashing detergents  
 (mild detergents contg. polyoxyalkyleneamide carboxylic acid salts and glyceride alkoxylates)

IT Polyoxyalkylenes, uses

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (reaction products with soya glyceride; mild detergents contg. polyoxyalkyleneamide carboxylic acid salts and glyceride alkoxylates)

IT Glycerides, uses  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (soya, ethoxylated; mild detergents contg. polyoxyalkyleneamide carboxylic acid salts and glyceride alkoxylates)

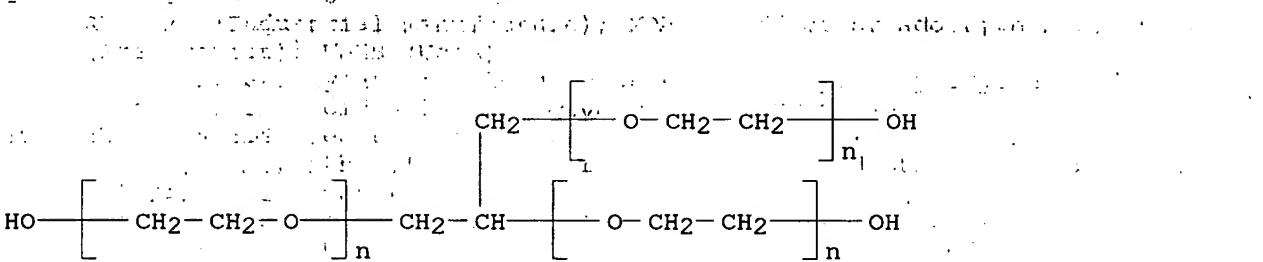
IT 25322-68-3DP, reaction products with soya glyceride  
 31694-55-0DP, Ethoxylated glycerin, reaction products with soybean oil fatty acid ester  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (mild detergents contg. polyoxyalkyleneamide carboxylic acid salts and glyceride alkoxylates)

IT 142-78-9 32993-46-7 60828-88-8 112409-52-6 174303-62-9  
 174303-64-1 179471-61-5 208393-48-0 211638-43-6  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (mild detergents contg. polyoxyalkyleneamide carboxylic acid salts and glyceride alkoxylates)

IT 31694-55-0DP, Ethoxylated glycerin, reaction products with soybean oil fatty acid ester  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (mild detergents contg. polyoxyalkyleneamide carboxylic acid salts and glyceride alkoxylates)

RN 31694-55-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.'-1,2,3-propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)



L35 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2001 ACS

AN 1998:379211 HCAPLUS

DN 129:55769

TI Manufacture of alkoxylated amides and their use in washing and cleaning products and toiletries

IN Oftring, Alfred; Oetter, Guenter; Baur, Richard; Borzyk, Oliver; Burkhart, Bernd; Ott, Christian; Aus dem Kahmen, Martin

PA BASF A.-G., Germany

SO Ger. Offen., 16 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM C07C233-18

ICS C07C231-14; C11D001-72; A61K007-00; A61K007-50; A61K007-075;  
 C08G065-26; B01F017-42

CC 46-3 (Surface Active Agents and Detergents)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19650151	A1	19980604	DE 1996-19650151	19961203
	WO 9824758	A2	19980611	WO 1997-EP6750	19971202
	WO 9824758	A3	19980820		
	W: BR, CN, ID, JP, KR, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE EP 946498			EP 1997-952862	19971202
	R: DE, FR, GB, IT	A2	19991006		
	US 6034257	A	20000307	US 1999-308669	19990603
PRAI	DE 1996-19650107		19961203		

DE 1996-19650151 19961203  
WO 1997-EP6750 19971202  
OS MARPAT 129:55769

AB R1CONR2CHR3CHR4O(CHR5CHR6O)nH [R1 = C5-25 alk(en)yl; R2 = H, C1-20 (O-interrupted) alkyl; R3-R6 = H; R3 .noteq. R4 = Me; R5 .noteq. R6 = Me], useful as nonionic surfactants or emulsifiers, are manufd. by (1) reacting glycerides with (ethanol)amines, (2) acidifying the mixts. with aq. acids and sepg. the glycerin-contg. aq. phase from fatty amide-contg. org. phase, and (3) ethoxylating and/or propoxylating and/or butoxylating the fatty amides. For example, a mixt. of 348.9 g MeNHCH<sub>2</sub>CH<sub>2</sub>OH and 27.0 g NaOMe (30% in MeOH) was treated over 80 min at 80.degree. with 1305.0 g rapeseed oil, the mixt. was stirred for 15 min, dild. with 1000 mL H<sub>2</sub>O, heating was discontinued and the whole acidified with HCl to pH 3-4 and the phases sepd. The org. phase was washed twice with 750 mL H<sub>2</sub>O and dewatered by distn. in vacuo to give rapeseed oil N-methylethanalamide as a viscous, brown oil. This (426.5 g) was combined with 9.0 g NaOMe, dried for 2 h at 120.degree./16 mbar and ethoxylated at that temp. with 132.0 g ethylene oxide (EO) (max pressure 3.5 bar), cooled to 80.degree. and evacuated to give viscous, brown oil free from EO, having OH no. 95 mg KOH/g and contg. 3.3% polyethylene glycol.

ST glycerin sepn fatty amide manuf; glyceride amidation glycerol sepn fatty amide; rapeseed oil amidation methylethanalamine glycerol sepn; ethoxylation rapeseed oil N methylethanalamide

IT Detergents

(cleaning agents; manuf. of ethoxylated amides for use in)

IT Polyoxyalkylenes, preparation

RL: IMF (Industrial manufacture); PREP (Preparation)

(ethers with fatty amides; manuf. of ethoxylated amides and their use in washing and cleaning products and toiletries);

IT Coco amides

RL: IMF (Industrial manufacture); PREP (Preparation); (fatty amido group-terminated, rapeseed-oil, ethoxylated; manuf. of ethoxylated amides as surfactants and their use in washing and cleaning products and toiletries)

IT Polyoxyalkylenes, preparation

RL: IMF (Industrial manufacture); PREP (Preparation); (fatty amido group-terminated, rapeseed-oil, ethoxylated; manuf. of ethoxylated amides and their use in washing and cleaning products and toiletries)

IT Amides, preparation

RL: IMF (Industrial manufacture); PREP (Preparation); (fatty, alkoxylated, rapeseed-oil, ethoxylated; manuf. of ethoxylated amides and their use in washing and cleaning products and toiletries);

IT Skin cleansers

(manuf. of ethoxylated amides and their use in washing and cleaning products and toiletries)

IT Emulsifying agents

(manuf. of ethoxylated amides and their use in washing and cleaning products and toiletries as)

IT Nonionic surfactants

(manuf. of ethoxylated amides as surfactants and their use in washing and cleaning products and toiletries)

IT Glycerides, processes

RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); (manuf. of ethoxylated amides by aminolysis of glycerides and sepn. of)

IT Lubricants

(manuf. of ethoxylated amides for use as)

IT Laundry detergents

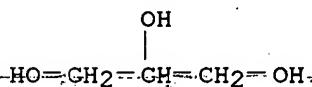
(manuf. of ethoxylated amides for use in)

IT 124-41-4, Sodium methoxide

RL: CAT (Catalyst use); USES (Uses); (amidation and ethoxylation catalyst; manuf. of ethoxylated amides and their use in washing and cleaning products and toiletries)

IT 74-89-5DP, Methylamine, amides with rapeseed oil fatty acids, ethoxylated 109-83-1DP, N-Methylethanalamine, amides with

rapeseed oil fatty acids, ethoxylated 111-75-1DP,  
 N-Butylethanolamine, amides with coconut oil fatty acids  
 , ethoxylated 25322-68-3DP, Polyethylene glycol, ethers with fatty  
 amides  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (manuf. of ethoxylated amides and their use in washing and  
 cleaning products and toiletries)  
 IT 56-81-5, Glycerol, processes  
 RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical  
 process); FORM (Formation, nonpreparative); PROC (Process)  
 (manuf. of ethoxylated amides by aminolysis of glycerides and  
 sepn. of)  
 IT 56-81-5, Glycerol, processes  
 RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical  
 process); FORM (Formation, nonpreparative); PROC (Process)  
 (manuf. of ethoxylated amides by aminolysis of glycerides and  
 sepn. of)  
 RN 56-81-5 HCAPLUS  
 CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L35 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2001 ACS  
 AN 1997:443360 HCAPLUS  
 DN 127:67720  
 TI Liquid dishwashing detergents with good detergency in hard water  
 IN Brumbaugh, Ernest H.  
 PA Amway Corporation, USA  
 SO PCT Int. Appl., 18 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C11D  
 CC 46-6 (Surface Active Agents and Detergents)  
 FAN.CNT 1  
 PATENT NO. KIND DATE APPLICATION NO. DATE  
 PI WO 9718284 A2 19970522 WO 1996-US18286 19961112  
 WO 9718284 A3 19970619  
 W: AU, BR, CA, CN, JP, KR, MX  
 RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
 AU 9677331 A1 19970605 AU 1996-77331 19961112  
 AU 705326 B2 19990520  
 CN 1207760 A 19990210 CN 1996-199580 19961112  
 EP 906388 A2 19990407 EP 1996-940452 19961112  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI  
 BR 9612494 A 19991123 BR 1996-12494 19961112  
 JP 2000502118 T2 20000222 JP 1997-519078 19961112  
 US 5998355 A 19991207 US 1997-976900 19971124  
 PRAI US 1995-559552 19951116  
 WO 1996-US18286 19961112  
 OS MARPAT 127:67720  
 AB The title detergents are prep'd. that exhibit increased viscosity, better  
 dissoln. rate and surprisingly improved cleaning performance in hard  
 water, comprising from about 1-90% of an anionic surfactant and from about  
 1-30% of a solvent hydrotrope selected from the group consisting of  
 alkoxylated glycerides, alkoxylated glycerines, esters of alkoxylated  
 glycerines, alkoxylated fatty acids, esters of glycerin, polyglycerol  
 esters and combinations thereof.  
 ST liq dishwashing detergent hard water tolerance; anionic surfactant

dishwashing detergent; alkoxylated glycerin dishwashing detergent;  
 glyceride alkoxylated dishwashing detergent; fatty acid alkoxylated  
 dishwashing detergent; polyglycerol ester dishwashing detergent;  
 hydrotrope solvent dishwashing detergent; viscosity improvement  
 dishwashing detergent

**IT Fatty acids, uses**  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (alkoxylated; liq. **dishwashing** detergents with good  
 detergency in hard water)

**IT Glycerides, uses**  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (alkoxylates for hydrotropes/solvents; liq. **dishwashing**  
 detergents with good detergency in hard water)

**IT Coco fatty acids**  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (hydrotropes from alkoxylated esters; liq. **dishwashing**  
 detergents with good detergency in hard water)

**IT Esters, uses**  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (hydrotropes from alkoxylated **glycerol-** or **glyceride**  
 -based; liq. **dishwashing** detergents with good detergency in  
 hard water)

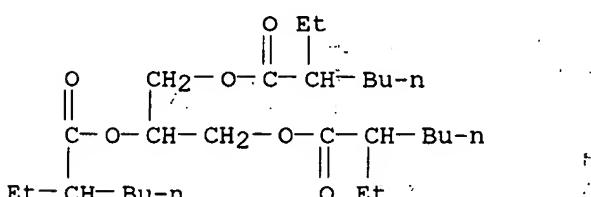
**IT Polyoxyalkylenes, uses**  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (hydrotropes/solvents; liq. **dishwashing** detergents with good  
 detergency in hard water)

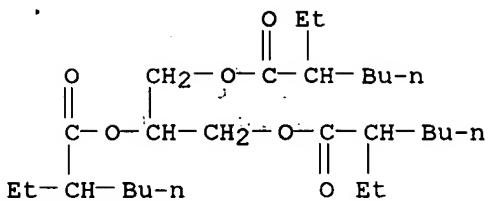
**IT Dishwashing detergents**  
 Hydrotropes  
 Solvents  
 (liq. **dishwashing** detergents with good detergency in hard  
 water)

**IT 107-41-5, Hexylene glycol 7360-38-5, Glycerol**  
 tris(2-ethyl hexanoate) 9004-81-3, Polyethylene glycol laurate  
 9007-48-1, Polyglyceryl oleate 25322-69-4, Polypropylene glycol  
 31694-55-0, Glycereth 26 31694-55-0D, Polyethylene  
 glycol glyceryl ether, cocoate 83138-62-9, Polyglycerol  
 isostearate 191278-56-5 191358-52-8, Polyethylene  
 glycol **glycerol** laurate oleate  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (hydrotropes/solvents; liq. **dishwashing** detergents with good  
 detergency in hard water)

**IT 7360-38-5, Glycerol tris(2-ethyl hexanoate)**  
 9007-48-1, Polyglyceryl oleate 31694-55-0, Glycereth 26  
 31694-55-0D, Polyethylene glycol glyceryl ether, cocoate  
 83138-62-9, Polyglycerol isostearate 191278-56-5  
 191358-52-8, Polyethylene glycol **glycerol** laurate oleate  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (hydrotropes/solvents; liq. **dishwashing** detergents with good  
 detergency in hard water)

**RN 7360-38-5 HCAPLUS**  
**CN Hexanoic acid, 2-ethyl-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)**



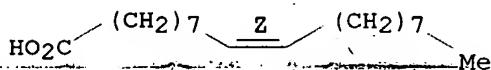


RN 9007-48-1 HCAPLUS  
CN 1,2,3-Propanetriol, homopolymer, (9Z)-9-octadecenoate (9CI) (CA INDEX NAME)

CM 1

CRN 112-80-1  
CMF C18 H34 O2  
CDES 2:Z

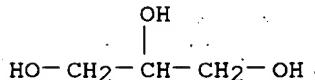
Double bond geometry as shown.



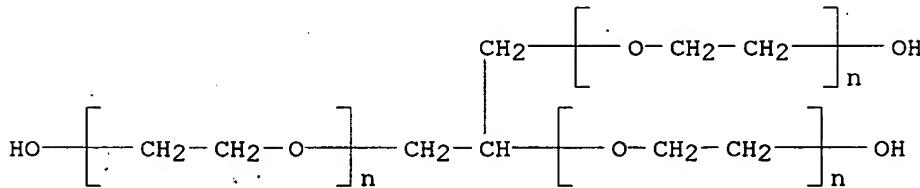
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CRN 25618-55-7  
CMF (C3 H8 O3)  
CCI PMS

CM 3

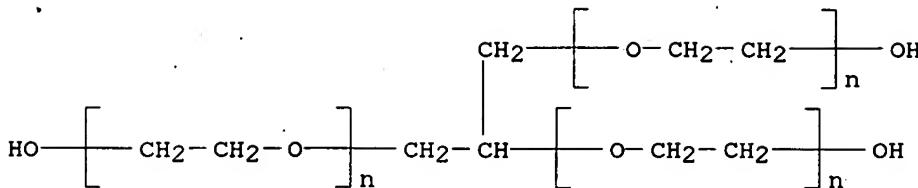
CRN 56-81-5  
CMF C3 H8 O3



RN 31694-55-0 HCAPLUS  
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 31694-55-0 HCAPLUS  
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 83138-62-9 HCAPLUS

CN 1,2,3-Propanetriol, homopolymer, isooctadecanoate (9CI) (CA INDEX NAME)

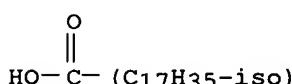
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CRN 30399-84-9

CMF C18 H36 O2

CCI IDS

CDES 8:ID,ISO



CM 2

CRN 25618-55-7

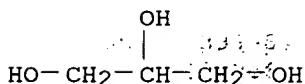
CMF (C3 H8 O3)x

CCI PMS

CM 3

CRN 56-81-5

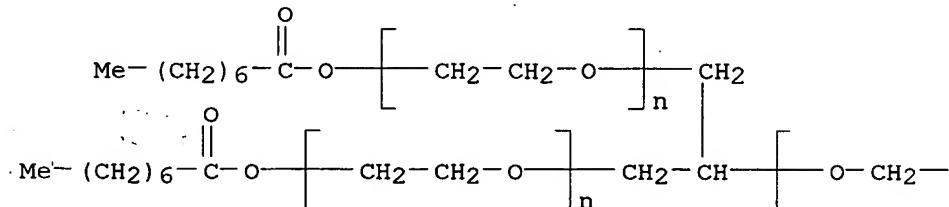
CMF C3 H8 O3

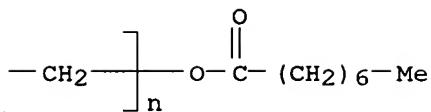


RN 191278-56-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''1,2,3-propanetriyltris[.omega.-[(1-oxooctyl)oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A





RN 191358-52-8 HCAPLUS

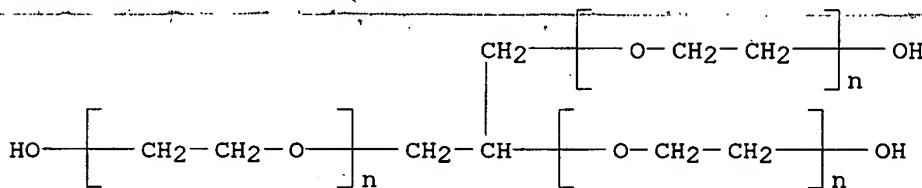
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''1,2,3-propanetriyltris[.omega.-hydroxy-, dodecanoate (9Z)-9-octadecenoate (9CI) (CA INDEX NAME)

CM 1

CRN 31694-55-0

CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>3</sub> H<sub>8</sub> O<sub>3</sub>

CCI PMS



CM 2

CRN 143-07-7

CMF C<sub>12</sub> H<sub>24</sub> O<sub>2</sub>HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>10</sub>-Me

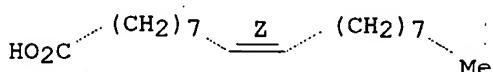
CM 3

CRN 112-80-1

CMF C<sub>18</sub> H<sub>34</sub> O<sub>2</sub>

CDES 2:Z

Double bond geometry as shown.



L35 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2001 ACS

AN 1996:707958 HCAPLUS

DN 125:332359

TI Low-viscosity aqueous dispersion concentrates of opacifiers

IN Baumoeller, Guido; Wadle, Armin; Ansmann, Achim; Tesmann, Holger; Foerster, Thomas

PA Henkel KGaA, Germany

SO Ger. Offen., 7 pp.

CODEN: GWXXBX

DT Patent

LA German  
 IC ICM B01F017-00  
 ICS B01F017-56; B01F017-34; B01F017-22; C11D001-66; C11D003-20;  
 C11D003-18; A61K007-075; A61K007-50  
 ICA B01F017-02; B01F017-12; B01F017-08; B01F017-04; B01F017-10; B01F017-42;  
 B01F017-28; B01F017-30; B01F017-14; B01F017-18; C07C069-22  
 CC 46-4 (Surface Active Agents and  
 Detergents)  
 Section cross-reference(s): 45, 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19511572	A1	19961002	DE 1995-19511572	19950329
	DE 19511572	C2	19980226		
	WO 9630476	A1	19961003	WO 1996-EP1197	19960320
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 817826		A1	19980114	EP 1996-908084	19960320
EP 817826		B1	20000524		
	R: DE, ES, FR, GB, IT, FI				
JP 11502879		T2	19990309	JP 1996-528883	19960320
ES 2147922		T3	20001001	ES 1996-908084	19960320
US 5888487		A	19990330	US 1997-930570	19971031
PRAI	DE 1995-19511572		19950329		
	WO 1996-EP1197		19960320		

OS MARPAT 125:332359

AB Wax-based title concs. with solids content 40-60%, useful for dishwashing detergents and shampoos, contain emulsifiers based on hydrophilic nonionic surfactant with HLB value >10 and hydrophobic nonionic surfactant with HLB value <10.  
 ST wax based opacifier conc nonionic emulsifier; shampoo opacifier conc low viscosity; dishwashing detergent opacifier conc low viscosity; aq dispersion conc wax based opacifier

IT Glycerides, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
 (hardened, opacifiers; low-viscosity opacifier aq. dispersion concs. contg. nonionic emulsifiers for dishwashing detergents and shampoos)

IT Opacifiers

(low-viscosity opacifier aq. dispersion concs. contg. nonionic emulsifiers for dishwashing detergents and shampoos)

IT Paraffin waxes and Hydrocarbon waxes, uses

Waxes and Waxy substances

RL: TEM (Technical or engineered material use); USES (Uses)  
 (opacifiers; low-viscosity opacifier aq. dispersion concs. contg. nonionic emulsifiers for dishwashing detergents and shampoos)

IT Alcohols, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
 (C16-18, opacifiers; low-viscosity opacifier aq. dispersion concs. contg. nonionic emulsifiers for dishwashing detergents and shampoos)

IT Fatty acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
 (esters, with glycols, opacifiers; low-viscosity opacifier aq. dispersion concs. contg. nonionic emulsifiers for dishwashing detergents and shampoos)

IT Glycerides, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
 (mono-, opacifiers; low-viscosity opacifier aq. dispersion concs. contg. nonionic emulsifiers for dishwashing detergents and shampoos)

IT Emulsifying agents

(nonionic, low-viscosity opacifier aq. dispersion concs. contg. nonionic emulsifiers for dishwashing detergents and shampoos)

IT 627-83-8, Ethylene glycol distearate

RL: TEM (Technical or engineered material use); USES (Uses)  
 (Cutina K 2-2747, opacifier; low-viscosity opacifier aq. dispersion

concs. contg. nonionic emulsifiers for **dishwashing** detergents  
 and shampoos)  
 IT 27215-38-9, Monomuls 90L12 183023-68-9, Plantaren APG 1200  
 RL: NUU (Nonbiological use, unclassified); USES (Uses)  
 (emulsifier; low-viscosity opacifier aq. dispersion concs. contg.  
 nonionic emulsifiers for **dishwashing** detergents and shampoos)  
 IT 25322-68-3D, C16-18 **fatty acid esters**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (opacifiers; low-viscosity opacifier aq. dispersion concs. contg.  
 nonionic emulsifiers for **dishwashing** detergents and shampoos)  
 IT 27215-38-9, Monomuls 90L12  
 RL: NUU (Nonbiological use, unclassified); USES (Uses)  
 (emulsifier; low-viscosity opacifier aq. dispersion concs. contg.  
 nonionic emulsifiers for **dishwashing** detergents and shampoos)  
 RN 27215-38-9 HCPLUS  
 CN Dodecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)

CM 1

CRN 143-07-7  
CMF C12 H24 O2

HO2C= (CH2)10 -Me

CM 2  
 CRN 56-81-5  
 CMF C3 H8 O3  
CC(O)C(=O)O  
 HO—CH<sub>2</sub>—CH<sub>2</sub>—OH

L35 ANSWER 10 OF 24 HCPLUS COPYRIGHT 2001 ACS  
 AN 1996:681962 HCPLUS  
 DN 125:332409  
 TI Microemulsion all-purpose liquid cleaning compositions  
 IN Thomas, Barbara; Adamy, Steven; Broze, Guy; Mehreteab, Ammanuel; Bala,  
 Frank, Jr.; Mondin, Myriam; Loth, Myriam  
 PA Colgate-Palmolive Co., USA  
 SO U.S., 8 pp. Cont.-in-part of U.S. Ser. No. 192,902, abandoned.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM C11D001-722  
 ICS C11D001-83  
 NCL 510365000  
 CC 46-6 (Surface Active Agents and  
 Detergents)  
 FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5571459	A	19961105	US 1994-350576	19941207
	AU 9511489	A1	19950817	AU 1995-11489	19950131
	AU 680076	B2	19970717		
	CA 2141926	AA	19950808	CA 1995-2141926	19950206
	EP 668346	A1	19950823	EP 1995-300717	19950206
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
	BR 9500451	A	19950926	BR 1995-451	19950206
	PL 179655	B1	20001031	PL 1995-307113	19950206
	HU 70071	A2	19950928	HU 1995-372	19950207

US 5561106	A 19961001	US 1995-515785	19950816
PRAI US 1994-192902	19940207		
US 1994-203125	19940228		
US 1994-350576	19941207		
US 1995-384310	19950206		

AB The microemulsion compns. which are more friendly to the environment contain an anionic sulfate surfactant, an esterified polyethoxy ether surfactant, a co-surfactant, at least one hydrocarbon, and water, which can comprise the use of a water-insol. odoriferous perfume as the essential hydrocarbon in a proportion sufficient to form a dil. oil in water microemulsion compn. The compns. preferably contain 0.1-8% of an anionic sulfate surfactant, 1-50% of a co-surfactant, 1-20% of an ethoxylated glycerol type compd., 0.4-20% of perfume and the balance being water. A compn. contained Levenol V501/2 2.4, Mg laurylsulfate 3.6, ethylene glycol monohexyl ether 3.0, dodecane 1.0, and deionized water being the balance.

ST microemulsion all purpose cleaning compn; anionic sulfate surfactant cleaning compn

IT Tiles  
(Formica, greasy; microemulsion all-purpose liq. cleaning compns.)

IT Stains  
(bath; microemulsion all-purpose liq. cleaning compns.)

IT Perfumes  
(microemulsion all-purpose liq. cleaning compns.)

IT Grease  
(removal of; microemulsion all-purpose liq. cleaning compns.)

IT Surfactants  
(anionic, sulfates; microemulsion all-purpose liq. cleaning compns.)

IT Detergents  
(cleaning compns., microemulsion all-purpose liq. cleaning compns.)

IT Emulsions  
(micro-, microemulsion all-purpose liq. cleaning compns.)

IT Fatty acids, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(tallow, esters with polyethylene glycol ether with glycerol  
(3:1), microemulsion all-purpose liq. cleaning compns.)

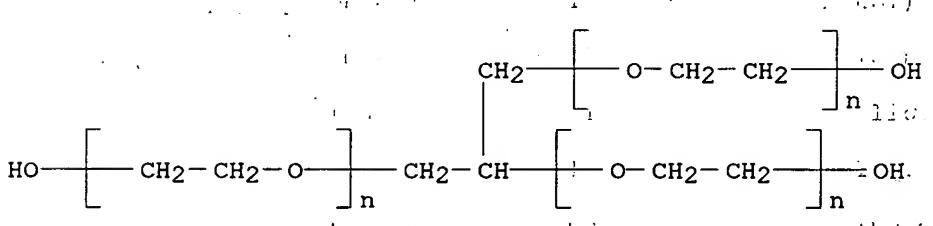
IT 112-25-4, Ethylene glycol monohexyl ether 112-40-3, Dodecane  
3097-08-3, Magnesium laurylsulfate 7732-18-5, Water, uses  
**31694-55-0**

IT RL: TEM (Technical or engineered material use); USES (Uses)  
(microemulsion all-purpose liq. cleaning compns.)

IT **31694-55-0**  
RL: TEM (Technical or engineered material use); USES (Uses)  
(microemulsion all-purpose liq. cleaning compns.)

RN 31694-55-0 HCPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''-1,2,3-  
propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)



L35 ANSWER 11 OF 24 HCPLUS COPYRIGHT 2001 ACS

AN 1996:225984 HCPLUS

DN 124:346614

TI Dishwashing detergent compositions useful for food

IN Isobe, Kenji; Ogawa, Tooru; Mori, Terutaka

PA Lion Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp..ii

CODEN: JKXXAF

USP

ns.)

DT Patent  
 LA Japanese  
 IC ICM C11D001-68  
 ICS C11D003-06; C11D003-20; C11D003-386  
 CC 46-6 (Surface Active Agents and  
 Detergents)  
 Section cross-reference(s): 7, 17

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08012995	A2	19960116	JP 1995-129388	19950428
PRAI	JP 1994-114515		19940429		
OS	MARPAT 124:346614				

AB Title compns., useful for removal of microorganisms from food, contain (A) R<sub>1</sub>CO<sub>2</sub>CH<sub>2</sub>CH(OZ<sub>1</sub>)CH<sub>2</sub>OZ<sub>2</sub> [R<sub>1</sub> = C<sub>7</sub>-17 alkyl, alkenyl; Z<sub>1</sub> and Z<sub>2</sub> is polycarboxylic acid (salt) and the other can be H] and/or (B) .gt;req.1 of (a) C<sub>8</sub>-18 fatty acid esters of glycerin, polyglycerin, sucrose, propylene glycol, sorbitan, and polyoxyethylene sorbitan ether and (b) food- or natural product-derived lecithin and enzyme-treated lecithin and (C) hydrolases. Thus, soybeans were washed with an aq. 0.3% mixt. of Na glycerin succinate monolaurate 20, Na<sub>2</sub>SO<sub>4</sub> 75, and Papain FL-3 (papain) 1 part to show effective removal of microorganisms.

ST detergent microorganism removal food; polycarboxylic acid monoglyceride ester detergent; hydrolase blend microorganism removal food; fatty acid polyol ester detergent; lecithin blend microorganism removal food

IT Detergents

Food  
 (dishwashing detergents contg. polycarboxylic acid monoglyceride esters, polyol fatty acid esters and/or lecithins and hydrolase useful for food)

IT 9001-92-7, Protease

RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
 (Alkalase 2.4LFG; dishwashing detergents contg. polycarboxylic acid monoglyceride esters, polyol fatty acid esters and/or lecithins and hydrolase useful for food)

IT 9012-54-8, Cellulase

RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
 (Cellulase 2000 CUN/g; dishwashing detergents contg. polycarboxylic acid monoglyceride esters, polyol fatty acid esters and/or lecithins and hydrolase useful for food)

IT 34406-66-1, Decaglycerin monolaurate

RL: FFD (Food or feed use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)  
 (Decaglyn 1-L; dishwashing detergents contg. polycarboxylic acid monoglyceride esters, polyol fatty acid esters and/or lecithins and hydrolase useful for food)

IT 9074-98-0, .beta.-Glucanase

RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
 (Glucane X; dishwashing detergents contg. polycarboxylic acid monoglyceride esters, polyol fatty acid esters and/or lecithins and hydrolase useful for food)

IT 9001-62-1, Lipase

RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
 (Lipozyme 10,000L; dishwashing detergents contg. polycarboxylic acid monoglyceride esters, polyol fatty acid esters and/or lecithins and hydrolase useful for food)

IT 9001-73-4, Papain

RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
 (Papain FL-3; dishwashing detergents contg. polycarboxylic acid monoglyceride esters, polyol fatty acid esters and/or lecithins and hydrolase useful for food)

IT acid monoglyceride esters, polyol fatty  
acid esters and/or lecithins and hydrolase useful for food)  
9032-75-1, Pectinase  
RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL  
(Biological study); USES (Uses)  
(Pectinex; dishwashing detergents contg. polycarboxylic  
acid monoglyceride esters, polyol fatty  
acid esters and/or lecithins and hydrolase useful for food)

IT 9000-90-2, .alpha.-Amylase  
RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL  
(Biological study); USES (Uses)  
(Tenase 1200; dishwashing detergents contg. polycarboxylic  
acid monoglyceride esters, polyol fatty  
acid esters and/or lecithins and hydrolase useful for food)

IT 27194-74-7P, Propylene glycol monolaurate,  
RL: FFD (Food or feed use); IMF (Industrial manufacture); TEM (Technical  
or engineered material use); BIOL (Biological study); PREP (Preparation);  
USES (Uses)  
(dishwashing detergents contg. polycarboxylic acid  
monoglyceride esters, polyol fatty acid  
esters and/or lecithins and hydrolase useful for food)

IT 9033-06-1, Glucosidase 142462-61-1, Viscozyme 120L 150977-36-9,  
Bromelain  
RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL  
(Biological study); USES (Uses)  
(dishwashing detergents contg. polycarboxylic acid  
monoglyceride esters, polyol fatty acid  
esters and/or lecithins and hydrolase useful for food)

IT 1337-30-0, Rikemal L 250A 7664-38-2D, Phosphoric acid, esters  
9005-67-8, Nikkol TS 10 26402-22-2, Poem M-200 52683-61-1,  
Ryoto Sugar Ester O-1570 102604-15-9 145053-71-0  
**145053-72-1 146701-91-9 151854-08-9**  
160936-20-9, Lecinol LL-20 176199-56-7  
RL: FFD (Food or feed use); TEM (Technical or engineered material use);  
BIOL (Biological study); USES (Uses)  
(dishwashing detergents contg. polycarboxylic acid  
monoglyceride esters, polyol fatty acid  
esters and/or lecithins and hydrolase useful for food)

IT 26402-22-2, Poem M-200 102604-15-9 145053-71-0  
**145053-72-1 146701-91-9 151854-08-9**  
**176199-56-7**  
RL: FFD (Food or feed use); TEM (Technical or engineered material use);  
BIOL (Biological study); USES (Uses)  
(dishwashing detergents contg. polycarboxylic acid  
monoglyceride esters, polyol fatty acid  
esters and/or lecithins and hydrolase useful for food)

RN 26402-22-2 HCPLUS  
CN Decanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)

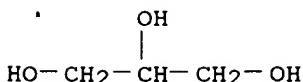
CM 1

CRN 334-48-5  
CMF C10 H20 O2

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>8</sub>—Me

CM 2

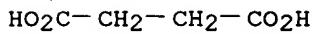
CRN 56-81-5  
CMF C<sub>3</sub> H<sub>8</sub> O<sub>3</sub>



RN 102604-15-9 HCAPLUS  
CN Butanedioic acid, monoester with 1,2,3-propanetriol monohexadecanoate  
(9CI) (CA INDEX NAME)

CM 1

CRN 110-15-6  
CMF C4 H6 O4



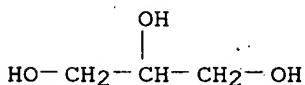
CM 2

CRN 57-10-3  
CMF C16 H32 O2



CM 3

CRN 56-81-5  
CMF C3 H8 O3



RN 145053-71-0 HCAPLUS  
CN Butanedioic acid, ester with 1,2,3-propanetriol monodecanoate, sodium salt  
(9CI) (CA INDEX NAME)

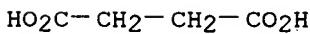
CM 1

CRN 334-48-5  
CMF C10 H20 O2



CM 2

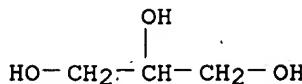
CRN 110-15-6  
CMF C4 H6 O4



CM 3

CRN 56-81-5

CMF C3 H8 O3



RN 145053-72-1 HCAPLUS

CN Butanedioic acid, ester with 1,2,3-propanetriol monododecanoate, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 143-07-7

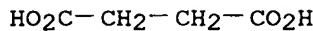
CMF C12 H24 O2



CM 2

CRN 110-15-6

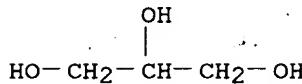
CMF C4 H6 O4



CM 3

CRN 56-81-5

CMF C3 H8 O3



RN 146701-91-9 HCAPLUS

CN Butanedioic acid, ester with 1,2,3-propanetriol monododecanoate (9CI) (CA INDEX NAME)

CM 1

CRN 143-07-7

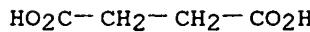
CMF C12 H24 O2



CM 2

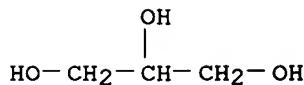
CRN 110-15-6

CMF C4 H6 O4



CM 3

CRN 56-81-5  
CMF C3 H8 O3



RN 151854-08-9 HCAPLUS

CN Butanedioic acid, ester with 1,2,3-propanetriol monotetradecanoate (9CI)  
(CA INDEX NAME)

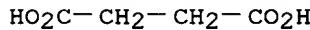
CM 1

CRN 544-63-8  
CMF C14 H28 O2



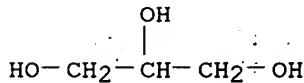
CM 2

CRN 110-15-6  
CMF C4 H6 O4



CM 3

CRN 56-81-5  
CMF C3 H8 O3

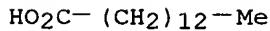


RN 176199-56-7 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, ester with 1,2,3-propanetriol  
monotetradecanoate (9CI) (CA INDEX NAME)

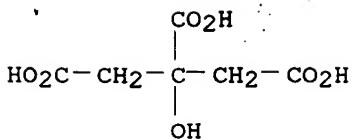
CM 1

CRN 544-63-8  
CMF C14 H28 O2



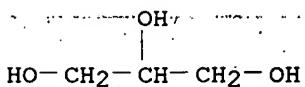
CM 2

CRN 77-92-9  
CMF C6 H8 O7



CM 3

CRN 56-81-5  
CMF C3 H8 O3



L35 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2001 ACS

AN 1995:985900 HCAPLUS

DN 124:11418

TI Liquid detergent composition with mildness to skin

IN Erilli, Rita; Adamy, Steven; Mehreteab, Ammanuel; Bala, Frank Jr

PA Colgate-Palmolive Co., USA

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C11D001-825

ICS C11D001-83; C11D001-94

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9523204	A1	19950831	WO 1995-US2162	19950227
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA, UZ, VN				
	RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9519257	A1	19950911	AU 1995-19257	19950227
	EP 748368	A1	19961218	EP 1995-911841	19950227
	R: DE, DK, FR, GR, SE				

PRAI US 1994-203125 19940228

US 1995-384310 19950206

WO 1995-US2162 19950227

AB A high-foaming light-duty liq. detergent compn. (e.g., for dishwashing) with good detergency and mildness to skin contains a partially esterified ethoxylated polyhydric alc. and .gtoreq.1 surfactant selected from water-sol. nonionic surfactants, water-sol. foaming anionic surfactants and water-sol. foaming betaine surfactants. A compn. contained Levenol F200 (partial esters of ethoxylated glycerol and coco fatty acids), coco amidopropyl betaine, ethoxylated fatty alcs., Na dodecanesulfonate, water, and additives.

ST solubilizer fatty ester ethoxylate glycerol detergent; skin mildness detergent ester ethoxylate glycerol; dishwashing liq detergent ester ethoxylate glycerol; liq detergent solubilizer ester ethoxylate glycerol

IT Solubilizers

(esters of fatty acids and ethoxylated glycerol; in liq. detergent compns. with mildness to skin)

IT Detergents

(dishwashing, liq., esters of fatty acids)

and ethoxylated glycerol as solubilizers in compns. with mildness to skin)

IT Detergents

(liq., esters of fatty acids and ethoxylated glycerol as solubilizers in compns. with mildness to skin)

IT 31694-55-0D, esters with fatty acids

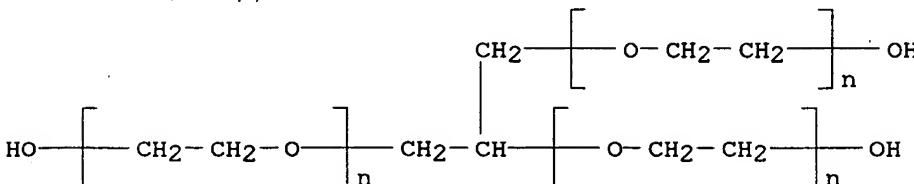
RL: TEM (Technical or engineered material use); USES (Uses) (solubilizers; in liq. detergent compns. with mildness to skin)

IT 31694-55-0D, esters with fatty acids

RL: TEM (Technical or engineered material use); USES (Uses) (solubilizers; in liq. detergent compns. with mildness to skin)

RN 31694-55-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris(.omega.-hydroxy- (9CI) (CA INDEX NAME)



L35 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2001 ACS

AN 1995:905367 HCAPLUS

DN 123:290538

TI Aqueous composition for cleaning of interior surfaces of dishwashing machines

IN Haerer, Juergen; Burg, Birgit; Jeschke, Peter; Hiller, Karlheinz

PA Henkel K.-G.a.A., Germany

SO Ger. Offen., 8 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM C11D001-66

ICS C11D001-825; C11D017-00; C07H015-04

ICA C07C233-18; C07C059-245; C07C059-265; C07C043-11

ICI C11D001-66, C11D003-20, C11D001-72, C11D001-66

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4401103	A1	19950720	DE 1994-4401103	19940117
	WO 9519417	A1	19950720	WO 1995-EP65	19950109

W: JP, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRAI DE 1994-4401103 19940117

OS MARPAT 123:290538

AB The title compn. contains an N-contg. nonionic surfactant (e.g., N-methyl-N-octanoylglucamine), a water-sol. polyhydric alc. (e.g., glycerol), and a water-sol. compd. contg. 2-6 C<sub>6</sub>-C<sub>12</sub> carboxy group, and, optionally, OH groups (e.g., citric acid) and removes lime deposits, food residues, etc., from metal, plastic, and rubber surfaces in dishwashing machines.

ST glucamide cleaner dishwashing machine; dishwashing machine interior cleaner; citric acid cleaner dishwashing machine; glycerol cleaner dishwashing machine

IT Incrustations

(aq. cleaners for interior surfaces of dishwashing machines for removal of)

IT Dishwashing

(machines; aq. cleaners for interior surfaces of)

IT Detergents

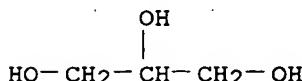
(cleaning compns., liq., for interior surfaces of **dishwashing** machines)

IT 56-81-5, **Glycerol**, uses 77-92-9, Citric acid, uses 6284-40-8D, N-Methylglucamine, amides with C6-12 **fatty acids** 9003-11-6D, Ethylene oxide-propylene oxide copolymer, monoalkyl ethers 25322-68-3D, Polyethylene glycol, monoalkyl ethers 85261-20-7, N-Methyl-N-decanoyleglucamine 85316-98-9, N-Methyl-N-octanoylglucamine  
RL: TEM (Technical or engineered material use); USES (Uses)  
(in aq. cleaners for interior surfaces of **dishwashing** machines)

IT 56-81-5, **Glycerol**, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(in aq. cleaners for interior surfaces of **dishwashing** machines)

RN 56-81-5 HCPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L35 ANSWER 14 OF 24 HCPLUS COPYRIGHT 2001 ACS

AN 1995:878862 HCPLUS

DN 123:260467

TI Solid compositions containing quaternary ammonium compounds with ester groups and showing good dispersibility in water

IN Wahle, Bernd; Bigorra Llosas, Joaquim; Pi, Rafael; Soler Codina, Antoni; Brau Balaque, Emili; Jansen, Yvonne; Waltenberger, Peter

PA Henkel KGaA, Germany; Pulcra S.A.

SO Ger.: 5 pp

CODEN: GWXXAW

DT Patent

LA German

IC ICM C07C219-06

ICS C07C213-08; C07C069-708; C07C069-734; D06M013-463; B01F017-18

ICA C07C043-13; C07C043-11; C07C043-178; C07C043-15; C07C211-03; A61K007-075; A61K007-08; A61K007-11; C08G065-32; C09K003-16

CC 46-5 (Surface Active Agents and Detergents)  
Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4339643	C1	19950608	DE 1993-4339643	19931120
	WO 9514654	A1	19950601	WO 1994-EP3743	19941111
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 729450	A1	19960904	EP 1995-901371	19941111
	EP 729450	B1	19980422		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
	JP 09505314	T2	19970527	JP 1994-514790	19941111
	AT 165337	E	19980515	AT 1995-901371	19941111
	ES 2115346	T3	19980616	ES 1995-901371	19941111
	US 5783534	A	19980721	US 1996-648100	19960715

PRAI DE 1993-4339643 19931120  
WO 1994-EP3743 19941111

OS MARPAT 123:260467

AB The title compns., contg. ethoxylated fatty alcs. and partial glycerides, are prep'd. for use as fabric softeners, hair conditioners, etc. The product of the esterification of 1 mol triethanolamine with 1.2 mol partially hydrogenated tallow fatty acids was mixed with ethoxylated (40 mol) tallow alc. and glycerol monostearate and quaternized with Me<sub>2</sub>SO<sub>4</sub> to give a waxy solid having a bright color and showing good dispersibility

ST when mixed (10 g) with 90 g water (pH 3.3).  
quaternary ammonium ester solid dispersibility water; softener fabric  
quaternary ammonium ester; hair conditioner quaternary ammonium ester;  
ethoxylate alc dispersant quaternary ammonium ester; glycerol monostearate  
dispersant quaternary ammonium ester; stearate glycerol dispersant  
quaternary ammonium ester

IT Quaternization  
(of triethanolamine **fatty acid esters** in prepn. of  
solid compns. with dispersibility in water)

IT Dispersing agents  
(partial **glycerides** and ethoxylated alcs.; in solid compns.  
contg. quaternized triethanolamine **fatty acid esters** with dispersibility in water)

IT Antistatic agents  
Softening agents  
(quaternized triethanolamine **fatty acid esters**, for  
fabrics; in solid compns. with dispersibility in water)

IT Hair preparations  
(conditioners, quaternized triethanolamine **fatty acid esters**  
in solid compns. with dispersibility in water)

IT Quaternary ammonium compounds, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ester group-contg., fabric softeners and **hair conditioners**;  
in solid compns. with dispersibility in water)

IT Alcohols, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(fatty, ethoxylated; in solid compns. contg. quaternized  
triethanolamine **fatty acid esters** with  
dispersibility in water)

IT 25322-68-3D, Polyethylene glycol, monoalkyl ethers 31566-31-1,  
**Glycerol monostearate**

RL: TEM (Technical or engineered material use); USES (Uses)  
(fabric softeners and **hair conditioners**; in solid compns.  
contg. quaternized triethanolamine **fatty acid esters** with  
dispersibility in water)

IT 77-78-1D, Dimethyl sulfate, quaternization products with esters of  
triethanolamine and **fatty acids** 102-71-6D,  
Triethanolamine, esters with **fatty acids**, quaternized  
RL: TEM (Technical or engineered material use); USES (Uses)  
(fabric softeners and **hair conditioners**; in solid compns.  
with dispersibility in water)

IT 31566-31-1, **Glycerol monostearate**  
RL: TEM (Technical or engineered material use); USES (Uses)  
(fabric softeners and **hair conditioners**; in solid compns.  
contg. quaternized triethanolamine **fatty acid esters** with  
dispersibility in water)

RN 31566-31-1 HCPLUS

CN Octadecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX  
NAME)

CM 1

CRN 57-11-4

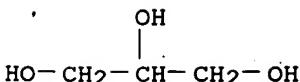
CMF C18 H36 O2

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>16</sub>—Me

CM 2

CRN 56-81-5

CMF C3 H8 O3



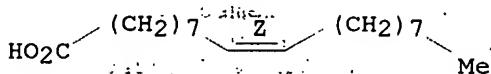
L35 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2001 ACS  
 AN 1995:680659 HCAPLUS  
 DN 123:59622  
 TI Low-foaming rinse aids containing alkoxylated sorbitol fatty acid esters and defoamers  
 IN Baum, Burton M.  
 PA Ecolab Inc., USA  
 SO PCT Int. Appl., 35 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C11D003-22  
 ICS C11D001-00; C11D010-04; C11D001-66; C11D017-00  
 CC 46-4 (Surface Active Agents and Detergents)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9424253	A1	19941027	WO 1994-US3194	19940324
	W: AU, CA, CN, NZ RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE AU 9465519	A1	19941108	AU 1994-65519	19940324
	AU 673072	B2	19961024		
PRAI	US 1993-50531		19930420		
	WO 1994-US3194		19940324		
AB	Food-grade rinse aids for dishwashing contain an alkoxylated sorbitol fatty acid ester, (e.g., Tween 80) and a defoamer (e.g., Na oleate).				
ST	dishwashing rinse aid alkoxylate sorbitol ester; ethoxylate sorbitol ester rinse aid dishwashing; defoamer rinse aid dishwashing; oleate sodium defoamer rinse aid; soap defoamer rinse aid dishwashing				
IT	Siloxanes and Silicones, uses Soaps				
	RL: MOA (Modifier or additive use); USES (Uses) (defoamers; in dishwashing rinse aids contg. alkoxylated sorbitol fatty acid esters)				
IT	Antifoaming agents (dishwashing rinse aids contg. alkoxylated sorbitol fatty acid esters and)				
IT	Dishwashing (rinse aids; alkoxylated sorbitol fatty acid ester-defoamer mixts. for)				
IT	Surfactants (nonionic, alkoxylated sorbitol fatty acid esters; dishwashing rinse aids contg. defoamers and)				
IT	143-19-1, Sodium oleate 9016-00-6, Dimethyl siloxane 25496-72-4 , Glycerol monooleate 31566-31-1, Glycerol monostearate 31900-57-9, Dimethylsilanediol polymer				
	RL: MOA (Modifier or additive use); USES (Uses) (defoamer; in dishwashing rinse aids contg. alkoxylated sorbitol fatty acid esters)				
IT	9005-65-6, Tween 80 RL: TEM (Technical or engineered material use); USES (Uses) (dishwashing rinse aids contg. defoamers and)				
IT	25496-72-4, Glycerol monooleate 31566-31-1, Glycerol monostearate RL: MOA (Modifier or additive use); USES (Uses) (defoamer; in dishwashing rinse aids contg. alkoxylated sorbitol fatty acid esters)				
RN	25496-72-4 HCAPLUS				
CN	9-Octadecenoic acid (9Z)-, monoester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)				

CM 1

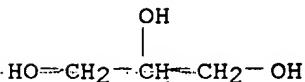
CRN 112-80-1  
CMF C18 H34 O2  
CDES 2:Z

Double bond geometry as shown.



CM 2

CRN 56-81-5  
CMF C3 H8 O3



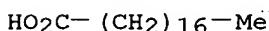
RN 31566-31-1 HCPLUS

CN Octadecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX  
NAME)

CM 1

CRN 57-11-4

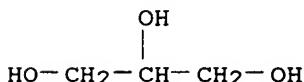
CMF C18 H36 O2



CM 2

CRN 56-81-5

CMF C3 H8 O3



L35 ANSWER 16 OF 24 HCPLUS COPYRIGHT 2001 ACS

AN 1994:194549 HCPLUS

DN 120:194549

TI Multipurpose high-efficiency detergent cream without water washing

IN Xu, Hanlie; Liu, Guanzhong

PA Peop. Rep. China

SO Faming Zhanli Shengqing Gongkai Shuomingshu, 9 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

IC ICM C11D001-74

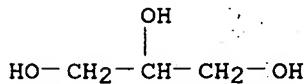
ICS C11D017-00; A61K007-50

CC 46-6 (Surface Active Agents and  
Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1067263	A	19921223	CN 1991-107409	19910527
AB	Detergents contain surfactants 2-10, bases 0.1-5, thickeners 1-15, skin-protecting agents 0.5-25, antifreeze agents 2-5, preservatives 0.1-2, antioxidants 0.1-2%, perfumes, and H <sub>2</sub> O. Thus, a detergent contained C16-18 alcs. 5, glycerin monostearate 1.5, stearic acid 4, while oil 12.5, a lauryl sulfate salt 4.5, glycerin 3, Peregual 4, poly(vinyl alc.) 3, H <sub>2</sub> O 60, light CaCO <sub>3</sub> 2.5%, and perfume.				
ST	detergent paste water washing free				
IT	Antioxidants (BHT, detergent pastes contg., requiring no water <b>washing</b> )				
IT	Lanolin	RL: USES (Uses)	(skin protecting agents, detergent pastes contg., requiring no water <b>washing</b> )		
IT	Alcohols, uses	RL: USES (Uses)	(C16-18, skin protecting agents, detergent pastes contg., requiring no water <b>washing</b> )		
IT	Fats and <b>Glyceridic</b> oils	RL: USES (Uses)	(apricot kernel, skin-protecting agents, detergent pastes contg., requiring no water <b>washing</b> )		
IT	<b>Fatty acids</b> , esters	RL: TEM (Technical or engineered material use); USES (Uses)	(ethoxylated, surfactants, detergent pastes contg., requiring no water <b>washing</b> )		
IT	Essential oils	RL: USES (Uses)	(orange, sweet, skin-protecting agents, detergent pastes contg., requiring no water <b>washing</b> )		
IT	Detergents	RL: USES (Uses)	(pastes, requiring no water <b>washing</b> )		
IT	Paraffin oils	RL: USES (Uses)	(white oils, skin protecting agents, detergent pastes contg., requiring no water <b>washing</b> )		
IT	57-55-6, 1,2-Propanediol, uses	RL: USES (Uses)	(antifreezes, detergent pastes contg., requiring no water <b>washing</b> )		
IT	128-37-0, BHT, miscellaneous	137-40-6, Sodium propionate	RL: MSC (Miscellaneous)	(antioxidants, detergent pastes contg., requiring no water <b>washing</b> )	
IT	57-13-6, Urea, uses	102-71-6, uses	142-91-6, Isopropyl hexadecanoate	471-34-1, Calcium carbonate, uses	RL: USES (Uses)
IT	94-26-8, Butyl p-hydroxybenzoate	99-76-3	120-47-8	RL: USES (Uses)	(preservatives, detergent pastes contg., requiring no water <b>washing</b> )
IT	56-81-5, 1,2,3-Propanetriol, miscellaneous	57-11-4, Stearic acid, miscellaneous	RL: MSC (Miscellaneous)	(skin protecting agents, detergent pastes contg., requiring no water <b>washing</b> )	
IT	75-21-8D, Oxirane, reaction products with lanolin alc. esters	120-40-1, Lauric acid diethanolamide	151-41-7D, Lauryl sulfate, salts	2016-48-0	9005-63-4 16613-87-9 25322-68-3D, Polyethylene glycol, fatty esters
IT	9002-89-5, Poly(vinyl alcohol)	9004-32-4	9005-38-3	12619-70-4,	RL: TEM (Technical or engineered material use); USES (Uses)
IT	Cyclodextrin 31566-31-1, Glycerin monostearate				

RL: USES (Uses)  
 (thickeners, detergent pastes contg., requiring no water  
**washing**)  
 IT 56-81-5, 1,2,3-Propanetriol, miscellaneous  
 RL: MSC (Miscellaneous)  
 (skin protecting agents, detergent pastes contg., requiring no water  
**washing**)  
 RN 56-81-5 HCAPLUS  
 CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



IT 31566-31-1, Glycerin monostearate  
 RL: USES (Uses)  
 (thickeners, detergent pastes contg., requiring no water  
**washing**)  
 RN 31566-31-1 HCAPLUS  
 CN Octadecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX  
 NAME)

CM 1

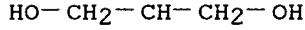
CRN 57-11-4 detergent pastes comp. refiling no. 1551  
 CMF C18 H36 O2

HO2C-(CH2)16-Me (Me = methyl) detergent

CM 2

CRN 56-81-5  
 CMF C3 H8 O3

OH



L35 ANSWER 17 OF 24. HCAPLUS COPYRIGHT 2001 ACS  
 AN 1993:149891 HCAPLUS  
 DN 118:149891  
 TI Drying agent compositions for automatic dishwashing machines  
 IN Itoi, Takashi; Tsutazumi, Junichi; Nakae, Tokuo  
 PA Kao Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 3 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese  
 IC ICM C11D017-00  
 ICS C11D001-68; C11D003-20

CC 46-6 (**Surface Active Agents and  
Detergents**)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 04306298 A2 19921029 JP 1991-70752 19910403

AB The title agents providing spot-free, shiny washed dishes contain (A) C8-14 partial fatty acid esters or C18 partial unsat'd. fatty acid esters of sucrose, sorbitan, propylene glycol, and (B) C8-14

fatty acid or C18 unsatd. fatty acid esters of glycerin succinate,  
 tartarate, or citrate at A/B wt. ratio 97/3 to 10/90. A compn. with good  
 low-temp. storability comprised sucrose caprate 20, glycerin succinate  
 caprate 10, propylene glycol 30, EtOH 10, and water 30 parts.  
 ST drying aid automatic dishwashing machine; fatty ester drying aid  
 dishwashing; polyol ester drying aid dishwashing  
 IT Esters, uses  
**Glycerides**, uses  
 RL: USES (Uses)  
     (drying aids, for automatic **dishwashing** machines)  
 IT Drying agents  
     (ester-based, for automatic **dishwashing** machines)  
 IT **Fatty acids**, esters  
 RL: USES (Uses)  
     (esters, drying aids, for automatic **dishwashing** machines)  
 IT 1323-39-3, Propylene glycol stearate 9007-48-1, Polyglycerin  
 oleate 9042-71-1, Sucrose myristate 11140-02-6, Glycerin  
 myristate 11140-04-8, Glycerin caprylate 26266-57-9, Sorbitan  
 palmitate 31835-06-0, Sucrose caprate 37321-62-3, Propylene glycol  
 laurate 51330-20-2 95508-00-2, Sorbitan caprylate  
 101994-21-2, Glycerin succinate laurate 102036-74-8,  
 Glycerin succinate palmitate 102036-75-9, Glycerin succinate  
 stearate 146701-89-5 146701-92-0 146701-93-1  
**146701-94-2 146701-95-3**  
 RL: USES (Uses)  
     (drying aids, for automatic **dishwashing** machines),  
 IT 9007-48-1, Polyglycerin oleate 11140-02-6, Glycerin  
 myristate 11140-04-8, Glycerin caprylate 51330-20-2  
 101994-21-2, Glycerin succinate laurate 102036-74-8,  
 Glycerin succinate palmitate 102036-75-9, Glycerin succinate  
 stearate 146701-89-5 146701-92-0 146701-93-1  
**146701-94-2 146701-95-3**  
 RL: USES (Uses)  
     (drying aids, for automatic **dishwashing** machines)

RN 9007-48-1 HCAPLUS  
 CN 1,2,3-Propanetriol, homopolymer, (9Z)-9-octadecenoate (9CI) (CA INDEX  
 NAME)

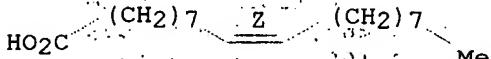
CM 1

CRN 112-80-1

CMF C18 H34 O2

CDES 2:Z

Double bond geometry as shown.



CM 2

CRN 25618-55-7

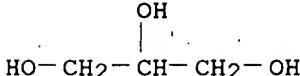
CMF (C3 H8 O3) x

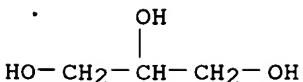
CCI PMS

CM 3

CRN 56-81-5

CMF C3 H8 O3





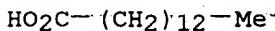
RN 11140-02-6 HCAPLUS

CN Tetradecanoic acid, ester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)

CM 1

CRN 544-63-8

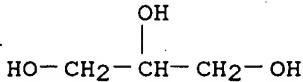
CMF C14 H28 O2



CM 2

CRN 56-81-5

CMF C3 H8 O3



RN 11140-04-8 HCAPLUS

CN Octanoic acid, ester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)

CM 1

CRN 124-07-2

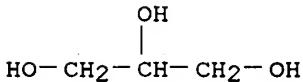
CMF C8 H16 O2



CM 2

CRN 56-81-5

CMF C3 H8 O3



RN 51330-20-2 HCAPLUS

CN 1,2,3-Propanetriol, homopolymer, hexadecanoate (9CI) (CA INDEX NAME)

CM 1

CRN 57-10-3

CMF C16 H32 O2

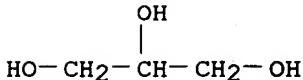


CM 2

CRN 25618-55-7  
CMF (C<sub>3</sub> H<sub>8</sub> O<sub>3</sub>)<sub>x</sub>  
CCI PMS

CM 3

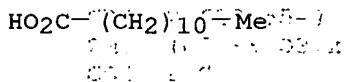
CRN 56-81-5  
CMF C<sub>3</sub> H<sub>8</sub> O<sub>3</sub>



RN 101994-21-2 HCAPLUS  
CN Butanedioic acid, ester with 1,2,3-propanetriol dodecanoate (9CI) (CA INDEX NAME)

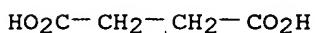
CM 1

CRN 143-07-7  
CMF C<sub>12</sub> H<sub>24</sub> O<sub>2</sub>



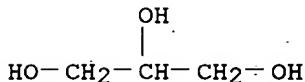
CM 2

CRN 110-15-6  
CMF C<sub>4</sub> H<sub>6</sub> O<sub>4</sub>



CM 3

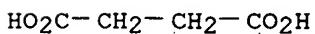
CRN 56-81-5  
CMF C<sub>3</sub> H<sub>8</sub> O<sub>3</sub>



RN 102036-74-8 HCAPLUS  
CN Butanedioic acid, ester with 1,2,3-propanetriol hexadecanoate (9CI) (CA INDEX NAME)

CM 1

CRN 110-15-6  
CMF C<sub>4</sub> H<sub>6</sub> O<sub>4</sub>



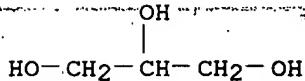
CM 2

CRN 57-10-3  
CMF C16 H32 O2

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>14</sub>—Me

CM 3

CRN 56-81-5  
CMF C3 H8 O3



RN 102036-75-9 HCAPLUS  
CN Butanedioic acid, ester with 1,2,3-propanetriol octadecanoate (9CI) (CA INDEX NAME)

CM 1

CRN 110-15-6  
CMF C4 H6 O4

HO<sub>2</sub>C—CH<sub>2</sub>—CH<sub>2</sub>—CO<sub>2</sub>H

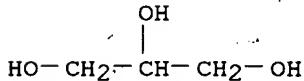
CM 2

CRN 57-11-4  
CMF C18 H36 O2

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>16</sub>—Me

CM 3

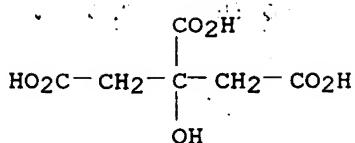
CRN 56-81-5  
CMF C3 H8 O3



RN 146701-89-5 HCAPLUS  
CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, ester with 1,2,3-propanetriol hexadecanoate (9CI). (CA INDEX NAME)

CM 1

CRN 77-92-9  
CMF C6 H8 O7



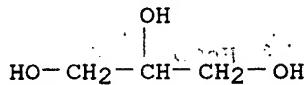
CM 2

CRN 57-10-3  
CMF C16 H32 O2



CM 3

CRN 56-81-5  
CMF C3 H8 O3



RN 146701-92-0 HCAPLUS  
CN Butanedioic acid, ester with 1,2,3-propanetriol octanoate (9CI) (CA INDEX NAME)

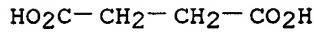
CM 1

CRN 124-07-2  
CMF C8 H16 O2



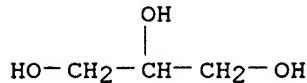
CM 2

CRN 110-15-6  
CMF C4 H6 O4



CM 3

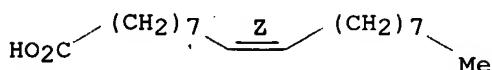
CRN 56-81-5  
CMF C3 H8 O3



RN 146701-93-1 HCAPLUS  
CN Butanedioic acid, ester with 1,2,3-propanetriol (9Z)-9-octadecenoate (9CI) (CA INDEX NAME)

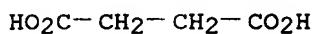
CM 1  
CRN 112-80-1  
CMF C18 H34 O2  
CDES 2:Z

Double bond geometry as shown.



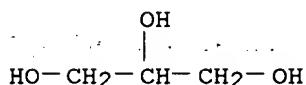
CM 2

CRN 110-15-6  
CMF C4 H6 O4



CM 3

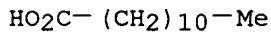
CRN 56-81-5  
CMF C3 H8 O3



RN 146701-94-2 HCAPLUS  
CN Butanedioic acid, 2,3-dihydroxy- (2R,3R)-, ester with 1,2,3-propanetriol dodecanoate (9CI) (CA INDEX NAME)

CM 1

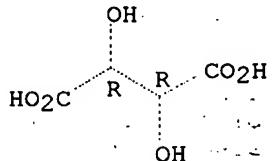
CRN 143-07-7  
CMF C12 H24 O2



CM 2

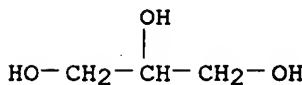
CRN 87-69-4  
CMF C4 H6 O6  
CDES 1:R2:R\*,R\*

Absolute stereochemistry.



CM 3

CRN 56-81-5  
CMF C3 H8 O3



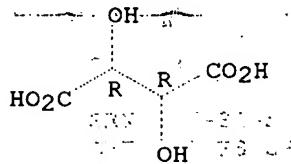
RN 146701-95-3 HCPLUS

CN Butanedioic acid, 2,3-dihydroxy- (2R,3R)-, ester with 1,2,3-propanetriol hexadecanoate (9CI) (CA INDEX NAME)

CM 1

CRN 87-69-4  
CMF C4 H6 O6  
CDES 1:R2:R\*,R\*

Absolute stereochemistry.



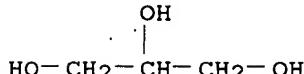
CM 2

CRN 57-10-3  
CMF C16 H32 O2

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>14</sub>-Me

CM 3

CRN 56-81-5  
CMF C3 H8 O3



L35 ANSWER 18 OF 24 HCPLUS COPYRIGHT 2001 ACS

AN 1993:126997 HCPLUS

DN 118:126997

TI Mixtures of fatty acid amides and esters as foam stabilizers

IN Smidrkal, Jan; Krob, Vaclav; Klecan, Vaclav; Smidrkalova, Eva; Korinek, Jaroslav

PA Czech.

SO Czech., 4 pp.

CODEN: CZXXA9

DT Patent

LA Czech

IC ICM C11D001-46

ICA C11D001-52; C11D003-32

CC 46-4 (Surface Active Agents and  
Detergents)

Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CS 273737	B1	19910411	CS 1988-6489	19880930
AB	Mixts. of C8-22 fatty acid amides and esters in a resp. wt. ratio 100:(2-50) are claimed as foam stabilizers for bath prepns., hair shampoos, liq. soaps, and detergents. The amide component comprises mono- or diethanolamides or their 20:(1-10) resp. mixts. and ester component comprises dihydroxypropyl monoesters, hydroxypropyl diesters, or/and (ethanol)aminoethyl esters of the above acids. Thus, to a liq. soap formulation contg. triethylammonium laurylsulfate 8, lauramidopropylbetaine 2, stearoyl ethylene glycol 2, distearoyl ethylene glycol 1, coconut oil sucroglyceride 1%, dye, and fragrance in H2O, was added 2% foam stabilizer comprising a synergistic mixt. of hydrogenated rapeseed oil fatty acid diethanolamides 72, ethanolamides 8, ethanolaminoethyl esters 12, and diethanolaminoethyl esters 8. The foam stability of the latter formulation after 10 min was 170 mm, vs. 152 mm without stabilizer and 162 mm with coco fatty acid diethanolamides as ref. foam stabilizers.				
ST	foam stabilizer liq soap; fatty amide ester foam stabilizer; rapeseed fatty diethanolamide foam stabilizer; hydroxypropyl ester rapeseed foam stabilizer; ethylaminoethyl ester coco foam stabilizer				
IT	Shampoos (foam stabilizers in, mixts. of fatty acid esters and amides as)				
IT	Stabilizing agents (for foams, mixts. of fatty acid esters and amides as)				
IT	Foams (stabilizers for, mixts. of fatty acid esters and amides as)				
IT	Amides, uses RL: USES (Uses) (C8-22, N,N-bis(hydroxyethyl), fatty acid esters and, foam stabilizers for soaps, shampoos, and detergents)				
IT	Amides, uses RL: USES (Uses) (C8-22, N-(hydroxyethyl), fatty acid esters and, foam stabilizers for soaps, shampoos, and detergents)				
IT	Fatty acids, esters RL: USES (Uses) (coco, esters, with diethanolaminoethane, foam stabilizer mixts. contg., for soaps, shampoos, and detergents)				
IT	Amides, uses RL: USES (Uses) (coco, N,N-bis(hydroxyethyl), foam stabilizer mixts. contg., for soaps, shampoos, and detergents)				
IT	Bath preparations (foams, stabilizers for, mixts. of fatty acid esters and amides as)				
IT	Soaps RL: USES (Uses) (liq., foam stabilizers in, mixts. of fatty acid esters and amides as)				
IT	Glycerides, uses RL: USES (Uses) (mixed mono- and di-, C8-22, foam stabilizers contg. fatty acid amides and, for soaps, shampoos, and detergents)				
IT	Glycerides, uses RL: USES (Uses) (rape-oil mono-, hydrogenated, foam stabilizer mixts. contg., for soaps, shampoos, and detergents)				
IT	Amides, uses RL: USES (Uses)				

(rape-oil, hydrogenated, N,N'-bis(hydroxyethyl), foam stabilizer mixts.  
contg., for soaps, shampoos, and detergents)

IT Amides, uses

RL: USES (Uses)

(rape-oil, hydrogenated, N-(hydroxyethyl), foam stabilizer mixts.  
contg., for soaps, shampoos, and detergents)

IT 56-81-5, 1,2,3-Propanetriol, uses

RL: USES (Uses)

(foam stabilizer mixt. contg. **fatty acid** amides and  
esters and, for soaps, shampoos, and detergents)

IT 102-71-6D, Triethanolamine, esters with coco and rapeseed oil

**fatty acids**

RL: USES (Uses)

(foam stabilizer mixt. contg. fatty amides and, for soaps, shampoos,  
and detergents)

IT 111-42-2D, coco and rape oil **fatty acid** amides and  
esters

RL: USES (Uses)

(foam stabilizer mixt. contg. **glycerol** and, for soaps,  
shampoos, and detergents)

IT 56-81-5, 1,2,3-Propanetriol, uses

RL: USES (Uses)

(foam stabilizer mixt. contg. **fatty acid** amides and  
esters and, for soaps, shampoos, and detergents)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)

HO—CH<sub>2</sub>—CH—CH<sub>2</sub>—OH

HO—CH<sub>2</sub>—CH—CH<sub>2</sub>—OH

L35 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2001 ACS

AN 1990:201182 HCAPLUS

DN 112:201182

TI Alkyl glycoside-based acleaning compositions for hard-surfaced articles

IN Saito, Hiroyuki; Saito, Kozo; Deguchi, Katsuhiko

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C11D017-00

ICS C11D001-68; C11D003-20

CC 46-6 (**Surface Active Agents and  
Detergents**)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01304198	A2	19891207	JP 1988-134887	19880601
JP 06031401	B4	19940427		

AB Title compns., mild on the skin with good foaming and detergency and  
useful for dishwashing, comprise 2-200 parts alkyl glycoside-based  
surfactants and 1 part fatty acid esters of trihydric or higher alcs.  
Thus, a compn. contg. 18% C9-11-alkyl glucoside and 4% capric acid  
monoglyceride (I) showed improved foaming and detergency with no chapping  
of hand compared with a control without I.

ST dishwashing detergent alkyl glucoside surfactant; polyhydric alc ester  
dishwashing detergent; fatty acid ester dishwashing detergent

IT Glycosides

RL: USES (Uses)

(alkyl, **dishwashing** detergents contg. **fatty**  
**acid** polyhydric alc. esters and)

IT Detergents

(cleaning compns., **dishwashing**, contg. alkyl glycosides and

IT fatty acid polyhydric alc. esters)  
Fatty acids, esters  
RL: USES (Uses)  
(esters, of polyhydric alcs. with, dishwashing detergents  
contg. alkyl glycosides and)  
IT Fatty acids, esters  
RL: USES (Uses)  
(esters, with polyhydric alcs., dishwashing detergents contg.  
alkyl glycosides and)  
IT 26402-22-2, Capric acid monoglyceride 27215-38-9  
, Lauric acid monoglyceride  
RL: USES (Uses)  
(alkyl glycoside-based surfactants contg., detergents for  
dishwashing)

IT 50-99-7D, Glucose, C9-13-alkyl derivs.  
RL: TEM (Technical or engineered material use); USES (Uses)  
(surfactants, contg. fatty acid polyhydric alc.  
esters, detergents for dishwashing)

IT 26402-22-2, Capric acid monoglyceride 27215-38-9  
, Lauric acid monoglyceride  
RL: USES (Uses)  
(alkyl glycoside-based surfactants contg., detergents for  
dishwashing)

RN 26402-22-2 HCAPLUS  
CN Decanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)

CM 1

CRN 334-48-5

CMF C10 H20 O2

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>8</sub>—Me

CM 2

CRN 56-81-5

CMF C3 H8 O3

OH

HO—CH<sub>2</sub>—CH—CH<sub>2</sub>—OH

RN 27215-38-9 HCAPLUS

CN Dodecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)

CM 1

CRN 143-07-7

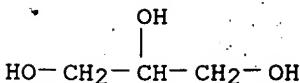
CMF C12 H24 O2

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>10</sub>—Me

CM 2

CRN 56-81-5

CMF C3 H8 O3



L35 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2001 ACS

AN 1988:206728 HCAPLUS

DN 108:206728

TI Detergent compositions containing abrasives

IN Deguchi, Katsuhiko; Saito, Hiroyuki

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C11D010-02

ICI C11D010-02, C11D001-29, C11D001-22, C11D001-14, C11D001-75, C11D001-52, C11D003-14, C11D001-722

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 63017999	A2	19880125	JP 1986-161197	19860709
JP 04041717	B4	19920709		

AB The title compns. with good dispersion stability (storability) and mildness to hands contain anionic surfactant(s) chosen from polyoxyethylene alkyl ether sulfate salt, alkylbenzenesulfonate salt, alpha.-olefin sulfonate salt, and alkane sulfonate 3-25, mono-linear-alkyl tertiary amine oxide 1-10, fatty acid alkanolamide 1-10, alkoxylated polyol and/or its sulfate ester salt 0.1-10, and water-insol abrasive (Mohs hardness 2-8, av. diam. 1-100 .mu.) at pH 4.0-6.5. A typical compn. (pH 5) for dishwashing comprised polyoxyethylene lauryl ether sulfate Na salt 10, lauryl dimethylamine oxide 4, coco fatty acid diethanolamide 5, polyethylene glycol 2, silica (Mohs hardness 7, and diam. 20 .mu.) 10, and water to 100%.

ST abrasive contg liq. detergent mild; silica contg dishwashing detergent mild

IT Amides, uses and miscellaneous

RL: USES (Uses)

(detergents, liq., dishwashing, contg. abrasives, mild)

IT Abrasives

(silica, in liq. dishwashing detergents, mild)

IT Detergents

(dishwashing, liq., contg., abrasives, storables, mild)

IT Amines, oxides

RL: USES (Uses)  
(N-oxides, detergents, liq., dishwashing, contg., abrasives, mild)

IT 7631-86-9, uses and miscellaneous

RL: USES (Uses)

(abrasives, liq., dishwashing detergents contg., mild)

IT 111-42-2D, coco fatty acid amides 1643-20-5, Lauryl dimethylamine oxide 9004-82-4, 9038-78-2, 25155-30-0, 25322-68-3, 25322-69-4 31694-55-0, Polyethylene glycol glycerol ether, 50586-59-9, 78067-35-3, 114464-79-8, 114465-08-6

RL: USES (Uses)

(detergents, liq., dishwashing, contg. abrasives, mild)

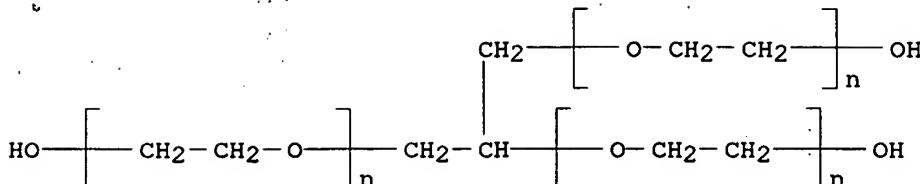
IT 31694-55-0, Polyethylene glycol glycerol ether 114464-79-8

RL: USES (Uses)

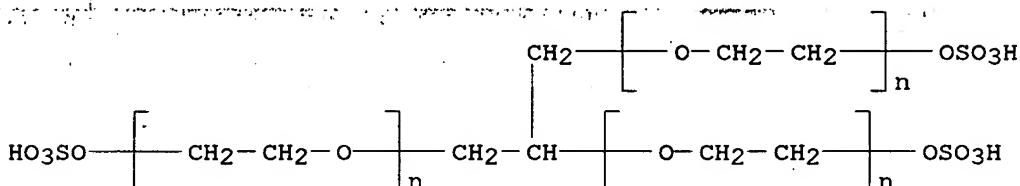
(detergents, liq., dishwashing, contg. abrasives, mild)

RN 31694-55-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.'-1,2,3-propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 114464-79-8 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''1,2,3-propanetriyltris[.omega.-{(sulfooxy)-}, sodium salt (9CI) (CA INDEX NAME),



● x Na

L35 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2001 ACS

AN 1988:152593 HCAPLUS

DN 108:152593

TI Rinsing aids for automatic dishwasher

IN Suzuki, Hideki; Sakai, Kaname; Kasahara, Akiko

PA Asahi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent No.: 62288697 Date: 19871215 Application No.: 1986-131272 Date: 19860606

LA Japanese

IC ICM C11D010-02

ICI C11D010-02, C11D001-72, C11D003-38, C11D003-20

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 62288697 A2 19871215 JP 1986-131272 19860606

AB The title aids providing spot-free glass and plastic tableware in reduced drying time contain polyoxyethylene sorbitan fatty acid ester, glycerol (and/or sugar alc.), and water. A compn. for polyoxyethylene sorbitan monolaurate 20, glycerol 60, and water 20% was dild. 1:2,000 and used as rinsing aid.

ST polyoxyethylene sorbitan laurate rinsing aid; glycerol rinsing aid automatic dishwasher

IT Detergents

(rinsing aids, polyoxyethylene sorbitan fatty acid ester-based, for automatic dishwashers)

IT Fatty acids, esters

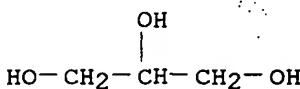
RL: USES (Uses)  
 (esters, with ethoxylated sorbitan, rinsing aids, for automatic dishwashers)

IT 50-70-4, Sorbitol, uses and miscellaneous 56-81-5, Glycerol, uses and miscellaneous 9005-64-5 9005-65-6, Polyoxyethylene sorbitan monooleate 9005-67-8, Polyoxyethylene sorbitan monostearate 9005-70-3

RL: USES (Uses)  
 (rinsing aids contg., for automatic dishwashers)

IT 56-81-5, Glycerol, uses and miscellaneous

RL: USES (Uses)  
(rinsing aids contg., for automatic dishwashers)  
RN 56-81-5 HCPLUS  
CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L35 ANSWER 22 OF 24 HCPLUS COPYRIGHT 2001 ACS

AN 1987:479993 HCPLUS

DN 107:79993

TI Emulsion-type dishwashing compositions

IN Deguchi, Katsuhiko; Tosaka, Masaki

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C11D003-38

CC 46-6 (Surface Active Agents and Detergents)

Section cross-reference(s): 75

FAN.CNT	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62027495	A2	19870205	JP 1985-167032	19850729
AB	Oil-in-water-type emulsions contg. lyotropic liq. crystals are prepd. from emulsifiers 5-40, emulsifying auxiliaries 0.5-10, oils 5-40%, and water. Thus, a compn. comprised polyoxyethylene sorbitan monostearate (d.p. 20, emulsifier) 6, sorbitan monostearate (emulsifier) 7, a liq. paraffin 15, cetylstearyl alc. 2, and water (balance).				
ST	emulsion dishwashing compn; lyotropic liq crystal dishwashing compn				
IT	Egg yolk (lecithins of, emulsifying auxiliaries, for oil-in-water-type emulsions, for dishwashing, contg. lyotropic liq. crystals)				
IT	Beeswax				
	Coconut oil				
	Olive oil				
	Paraffin oils				
IT	RL: USES (Uses) (oil-in-water-type emulsions, for dishwashing compns., contg. lyotropic liq. crystals)				
IT	Alcohols, uses and miscellaneous				
IT	RL: USES (Uses) (C16-18, emulsifying auxiliaries, for oil-in-water-type emulsions, for dishwashing, contg. lyotropic liq. crystals)				
IT	Oils, glyceridic				
IT	RL: USES (Uses) (avocado, oil-in-water-type emulsions, for dishwashing compns., contg. lyotropic liq. crystals)				
IT	Amides, uses and miscellaneous				
IT	RL: USES (Uses) (coco, N,N-bis(hydroxyethyl), emulsifiers for oil-in-water type emergence, for dishwashing, contg. lyotropic liq. crystals)				
IT	Detergents				
	(dishwashing, oil-in-water-type emulsions, contg. lyotropic liq. crystals)				
IT	Lecithins				
IT	RL: USES (Uses) (egg yolk, emulsifying auxiliaries, for oil-in-water-type emulsions, for dishwashing, contg. lyotropic liq. crystals)				
IT	Castor oil				
IT	RL: USES (Uses)				

(hydrogenated, poly(oxyethylene) derivs., emulsifiers, for oil-in-water-type emulsions for **dishwashing**, contg. lyotropic liq. crystals)

IT Waxes and Waxy substances  
RL: USES (Uses)  
(jojoba, oil-in-water-type emulsions, for **dishwashing** compns., contg. lyotropic liq. crystals)

IT Liquid crystals  
(lyotropic, oil-in-water-type emulsions contg., for **dishwashing**)

IT Emulsions  
(oil-in-water, for **dishwashing**, contg. lyotropic liq. crystals)

IT Amides, uses and miscellaneous  
RL: USES (Uses)  
(palm-oil, N-(hydroxyethyl), emulsifiers for oil-in-water type emergence, for **dishwashing**, contg. lyotropic liq. crystals)

IT Fatty acids, uses and miscellaneous  
RL: USES (Uses)  
(tallow, emulsifying auxiliaries, for oil-in-water-type emulsions, for **dishwashing**, contg. lyotropic liq. crystals)

IT 57-50-1D, beef tallow **fatty acid esters** 102-71-6D,  
**fatty acid salts** 124-22-1 1338-41-6, Sorbitan monostearate 9002-92-0 9005-67-8, Polyoxyethylene sorbitan monostearate 25322-68-3D; hardened castor oil derivs. 31566-31-1, Glycerin monostearate 31694-55-0D, mono beef tallow fatty esters 69070-98-0 107807-12-5 109882-91-9, RL: TEM (Technical or engineered material use); USES (Uses)  
(emulsifiers, for oil-in-water-type emulsions for **dishwashing** compns., contg. lyotropic liq. crystals)

IT 57-88-5, cholesterol, uses and miscellaneous 110-27-0, Isopropyl myristate 111-42-2D, coco alkyl derivs. 112-53-8, Lauryl alcohol 141-43-5D, palm-oil fatty amides 9004-32-4 9004-62-0 9004-67-5, Methyl cellulose 9007-16-3, 9049-37-0, Pectic acid sodium salt  
RL: USES (Uses)  
(emulsifying auxiliaries, for oil-in-water-type emulsions, for **dishwashing**, contg. lyotropic liq. crystals)

IT 7732-18-5  
RL: USES (Uses)  
(emulsions, oil-in-water, for **dishwashing**, contg. lyotropic liq. crystals)

IT 111-01-3, Squalane 7360-38-5 59130-69-7, Cetyllic 2-ethylhexanoate  
RL: USES (Uses)  
(oil-in-water-type emulsions, for **dishwashing** compns., contg. lyotropic liq. crystals)

IT 31566-31-1, Glycerin monostearate 31694-55-0D, mono beef tallow fatty esters  
RL: TEM (Technical or engineered material use); USES (Uses)  
(emulsifiers, for oil-in-water-type emulsions for **dishwashing** compns., contg. lyotropic liq. crystals)

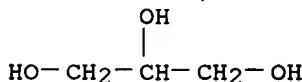
RN 31566-31-1, HCAPLUS

CN Octadecanoic acid, monoester with 1,2,3-propanetriol (9CI), (CA INDEX NAME) for

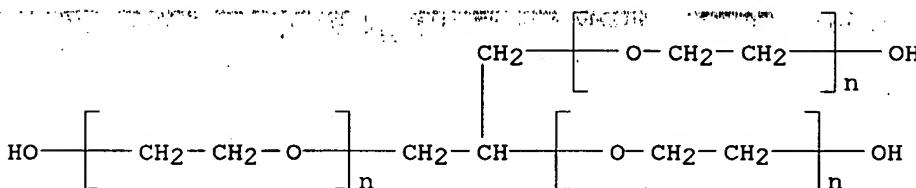
CM 1					
CRN 57-11-4					
CMF C18 H36 O2					

HO2C-(CH2)16-Me

CRN 56-81-5  
CMF C3 H8 O3



RN 31694-55-0 HCPLUS  
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',,.alpha.''1,2,3-  
propanetriyltris(.omega.-hydroxy- (9CI) (CA INDEX NAME)

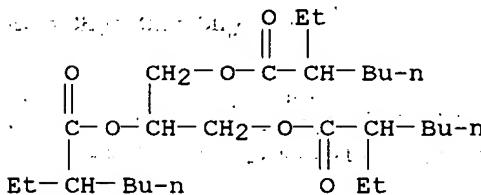


IT 7360-38-5

RL: USES (Uses)  
(oil-in-water-type emulsions, for dishwashing compns., contg.  
glyotropic liq. crystals)

RN 7360-38-5 HCPLUS

CN Hexanoic acid, 2-ethyl-, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



L35 ANSWER 23 OF 24 HCPLUS COPYRIGHT 2001 ACS

AN 1987:425152 HCPLUS

DN 107:25152

TI Low foaming biodegradable nonionic surfactants

AU Piorr, R.; Hoefer, R.; Schluessler, H. J.; Schmid, K. H.

CS Henkel K.-G.a.A.; Duesseldorf, 4000/1, Fed. Rep. Ger.

SO Fett Wiss. Technol. (1987), 89(3), 106-11

CODEN: FWTEEG

DT Journal

LA German

CC 46-4 (Surface Active Agents and Detergents)

Section cross-reference(s): 35

AB Mixed diethers and hydroxy mixed diethers of polyethylene glycol were good low-foaming surfactants for bottle washing and antifoaming agents for emulsion polymn. and were biodegradable.

ST polyoxyethylene diether antifoamer polymn; biodegradable nonionic nonfoaming detergent

IT Antifoaming agents (nonionic, biodegradable, ethoxylates, prepn. of, for emulsion polymn.)

IT Bottles

(washing of, prepn. of biodegradable nonionic low-foaming surfactants for)

IT Surfactants

(biodegradable, nonionic, low-foaming, ethoxylates, prepn. of, for automated bottle washing)

IT Fatty acids, esters  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (branched, vinyl esters, polymers with acrylic acid and vinyl acetate,  
 prepn. of, in emulsion, antifoaming agents for)

IT Polymerization  
 (emulsion, of acrylic acid with vinyl acetate and vinyl versatate,  
 antifoaming agents for)

IT Alcohols, compounds  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (fatty, ethoxylated, prepn. of, as low-foaming biodegradable detergents  
 for bottle washing)

IT 98815-11-3 98815-12-4 98815-13-5 98815-14-6  
 RL: USES (Uses)  
 (antifoaming agents, for emulsion polymn. of acrylic acid with vinyl  
 acetate and vinyl versatate)

IT 9004-98-2D, mixed ethers with hydroxystearyl alc. 25618-55-7D,  
 Poly glycerol, ethoxylated, alkyl ethers 61909-81-7D, mixed  
 ethers with oleyl alc. 94619-17-7 109075-71-0 109075-72-1  
 RL: USES (Uses)  
 (foam-inhibiting properties of)

IT 52503-47-6  
 RL: USES (Uses)  
 (foaming inhibiting properties of)

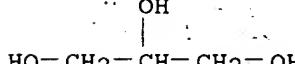
IT 79-10-7DP, polymers with vinyl acetate and branched fatty  
 acid vinyl esters 108-05-4DP, polymers with acrylic acid  
 and branched fatty acid vinyl esters  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, in emulsion, antifoaming agents for)

IT 25618-55-7D, Poly glycerol, ethoxylated, alkyl ethers  
 RL: USES (Uses)  
 (foam-inhibiting properties of)

RN 25618-55-7 HCAPLUS  
 CN 1,2,3-Propanetriol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 56-81-5  
CMF C3 H8 O3



L35 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2001 ACS  
 AN 1985:408015 HCAPLUS  
 DN 103:8015  
 TI Work of adhesion of oily dirt and correlation with washability  
 AU Saito, Masako; Otani, Mamiko; Yabe, Akihiko  
 CS Kyoritsu Women's Univ., Tokyo, Japan  
 SO Text. Res. J. (1985), 55(3), 157-64  
 CODEN: TRJOA9; ISSN: 0040-5175  
 DT Journal  
 LA English  
 CC 46-5 (Surface Active Agents and  
 Detergents)  
 Section cross-reference(s): 40  
 AB Adhesion and removal of dirt in the detergent process was interpreted from  
 the point of interfacial phenomena, and the energetic measure of the  
 adhesion and removal reaction was estd. by the work of adhesion ( $W_a$ ) of  
 each system using the dispersion and polar force components of polymers  
 and oily dirt. Soilability and washability of oily dirt were estd. from  
 the values of  $W_a$ , and the correlation between  $W_a$  and washability was  
 confirmed through expts. involving fatty acids, fatty alcs., and  
 triglycerides on cellulosic, diacetate, triacetate, and polyester fabrics.

The limitations and applicability of this surface energy anal. to the detergency system were then discussed.

ST work adhesion oily dirt textile; detergency oily dirt textile; acetate fiber work adhesion dirt; polyester fiber work adhesion dirt; cellulosic fiber work adhesion dirt; washability textile oily dirt; surface energy washability textile

IT Detergency  
(in oily dirt removal from textiles, work of adhesion and surface energy in relation to)

IT Polyester fibers, properties  
Rayon, properties  
RL: PRP (Properties)  
(work of adhesion of oily dirt on, washability in relation to)

IT Alcohols, properties  
Fatty acids, properties  
Glycerides, properties  
RL: PRP (Properties)  
(work of adhesion of, calcn. of, on fibers)

IT Energy  
(adhesive, of oily dirt, on textiles, washability in relation to)

IT Acetate fibers, properties  
RL: PRP (Properties)  
(diacetate, work of adhesion of oily dirt on, washability in relation to), and solubility of

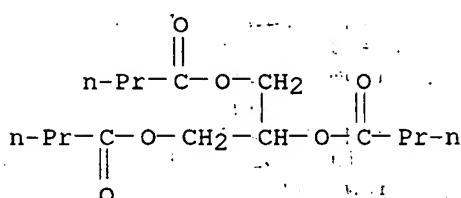
IT Acetate fibers, properties  
RL: PRP (Properties)  
(triacetate, work of adhesion of oily dirt on, washability in relation to)

IT 57-10-3, properties 57-11-4, properties 60-01-5 71-36-3, properties 71-41-0, properties 107-92-6, properties 111-27-3, properties 111-70-6 111-87-5, properties 112-30-1 112-53-8 112-72-1 124-07-2, properties 142-62-1, properties 143-07-7, properties 143-08-8 334-48-5 538-24-9 544-63-8, properties 555-43-1 555-44-2 555-45-3 621-70-5 26762-44-7 30207-98-8 36653-82-4  
RL: PRP (Properties)  
(work of adhesion of, calcn. of, on fibers)

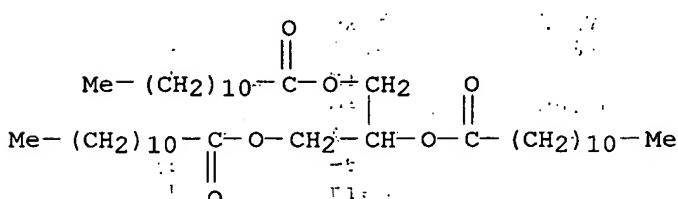
IT 60-01-5 538-24-9 555-43-1 555-44-2  
555-45-3 621-70-5  
RL: PRP (Properties)  
(work of adhesion of, calcn. of, on fibers)

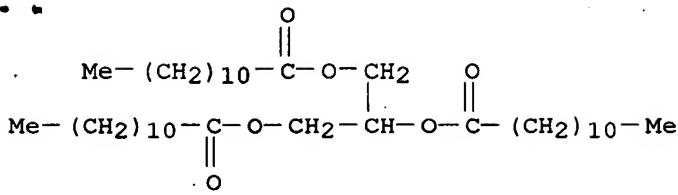
RN 60-01-5 HCAPLUS

CN Butanoic acid, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



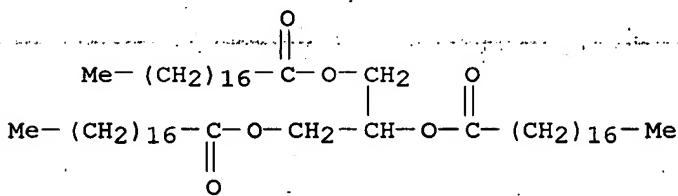
RN 538-24-9 HCAPLUS  
CN Dodecanoic acid, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)





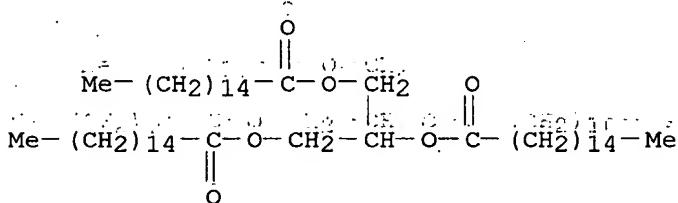
RN 555-43-1 HCPLUS

CN Octadecanoic acid, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



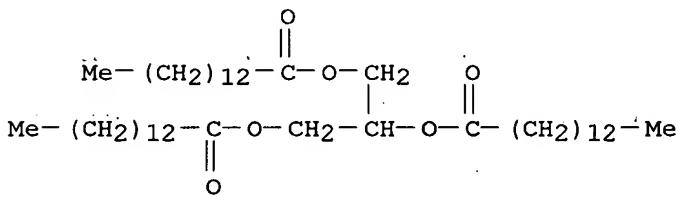
RN 555-44-2 HCPLUS

CN Hexadecanoic acid, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



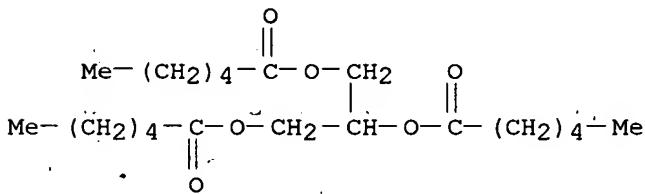
RN 555-45-3 HCPLUS

CN Tetradecanoic acid, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)

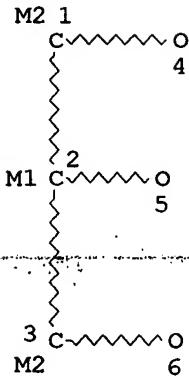


RN 621-70-5 HCPLUS

CN Hexanoic acid, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



L9                    SCR 1838  
L12                    STR



NODE ATTRIBUTES:

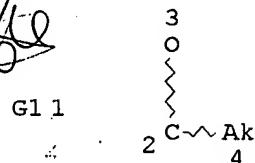
HCOUNT IS M2 AT 1  
HCOUNT IS M1 AT 2  
HCOUNT IS M2 AT 3  
NSPEC IS C AT 1  
NSPEC IS C AT 2  
NSPEC IS C AT 3  
NSPEC IS C AT 4  
NSPEC IS C AT 5  
NSPEC IS C AT 6  
DEFAULT MLEVEL IS ATOM  
MLEVEL IS CLASS AT 1 2 3 4 5 6  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

L15                    STR  
H 5



VAR G1=5/2

NODE ATTRIBUTES:

NSPEC IS C AT 1  
NSPEC IS C AT 2  
NSPEC IS C AT 3  
NSPEC IS C AT 4  
DEFAULT MLEVEL IS ATOM  
MLEVEL IS CLASS AT 2 3 4 5  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE

L17                    32587 SEA FILE=REGISTRY SSS FUL L12 AND L15 NOT L9

L19 99761 SEA FILE=HCAPLUS ABB=ON PLU=ON L17  
L20 47758 SEA FILE=HCAPLUS ABB=ON PLU=ON (SURFACE ACTIVE AGENTS AND  
DETERGENTS)/CC  
L21 1888 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND L19  
L33 827 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 AND (GLYCERID? OR  
TRIGLYCERID? OR GLYCEROL? OR MONOGLYCER? OR DIGLYCER?)/IT  
L34 243 SEA FILE=HCAPLUS ABB=ON PLU=ON (FATTY(3A)ACID)/IT AND L33  
L35 24 SEA FILE=HCAPLUS ABB=ON PLU=ON (BATH? OR DISH? OR WASH? OR  
HAIR)/IT AND L34  
L37 180 SEA FILE=HCAPLUS ABB=ON PLU=ON (DETERGENT? OR SHAMPOOS OR  
CONDITION? OR SOAP? OR SURFACTANT)/IT AND L34  
L39 52 SEA FILE=HCAPLUS ABB=ON PLU=ON ((ETHOXYLAT? OR ALKOXYLAT? OR  
PROPOXYL?) (S) (?GLYCER?)) AND L37  
L40 42 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 NOT L35

L40 ANSWER 1 OF 42 HCAPLUS COPYRIGHT 2001 ACS  
AN 2001:28646 HCAPLUS  
DN 134:87942  
TI Aqueous pearlescent surfactant concentrates  
IN Nieendick, Claus; Nalborczyk, Mirella; Eggers, Anke  
PA Cognis Deutschland G.m.b.H., Germany  
SO Eur. Pat. Appl., 15 pp.  
CODEN: EPXXDW  
DT Patent  
LA German  
IC ICM C11D003-20  
      ICS C11D001-66; C11D001-83; C11D001-835; C11D001-825; C11D001-94;  
      A61K007-075  
CC 46-3 (Surface Active Agents and  
Detergents)  
Section cross-reference(s): 62, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1067175	A1	20010110	EP 2000-113882	20000630
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 19931998	A1	20010118	DE 1999-19931998	19990709

PRAI DE 1999-19931998 19990709

AB The title compns. contain esters (prep'd. from polyols bearing 2-6 OH groups, -C1-22 fatty acids, and C2-4 hydroxy acids) 1-99.9, emulsifiers 0.1-99, and polyols 0-40%. An aq. mixt. of glycerol monostearate malate 25, ethoxylated (d.p. 4) coco alcs. 5, coco-alkyl glucoside 9, coco fatty acid betaine 5, and glycerol 5% had viscosity 7.4 and 7.7 Pa-s. after 1 and 14 days, resp., at 40.degree. and good stability after 4 wk at 40.degree..  
ST surfactant conc aq pearlescent; ester polyol surfactant aq pearlescent; glycerol stearate malate surfactant pearlescent; fatty acid betaine surfactant pearlescent; glucoside alkyl surfactant pearlescent

IT Fatty acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(C1-22, esters with polyols and hydroxy acids; aq. pearlescent surfactant concs.)

IT Alcohols, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(C2-6, polyhydric, esters with fatty acids and hydroxy acids; aq. pearlescent surfactant concs.)

IT Emulsifying agents

Pearly materials

Surfactants

(aq. pearlescent surfactant concs.)

IT Betaines

RL: TEM (Technical or engineered material use); USES (Uses)  
(coco fatty acid; aq. pearlescent surfactant concs.)

IT Fatty acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(coco, betaines; aq. pearlescent surfactant concs.)

IT Alcohols, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(coco, ethoxylated; aq. pearlescent surfactant concs.)

IT Glycosides

RL: TEM (Technical or engineered material use); USES (Uses)  
(coco-alkyl; aq. pearlescent surfactant concs.)

IT Carboxylic acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(hydroxy, C2-4, esters with polyols and fatty acids;  
aq. pearlescent surfactant concs.)

### IT- Esters, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(polyol-fatty acid-hydroxy acid; aq.  
pearlescent surfactant concs.)

IT 56-81-5, Glycerol, uses 627-83-8, Ethylene glycol  
distearate 236424-12-7, Glycerol monostearate malate  
316363-39-0, Ethylene glycol monostearate citrate 316363-40-3, Sorbitol  
distearate lactate  
RL: TEM (Technical or engineered material use); USES (Uses)  
(aq. pearlescent surfactant concs.)

RE.CNT 4

RE

- (1) Henkel Kgaa; DE 3843572 A 1990 HCAPLUS  
(2) Henkel Kgaa; DE 4103551 A 1992 HCAPLUS  
(3) Henkel Kgaa; DE 19719121 C 1998 HCAPLUS  
(4) Henkel Kgaa; DE 19814608 C 1999 HCAPLUS

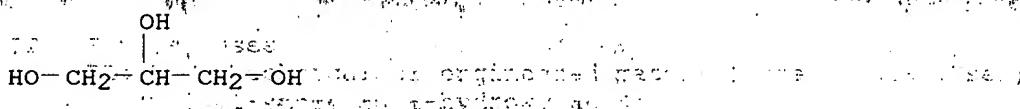
IT 56-81-5, Glycerol, uses 236424-12-7

#### **Glycerol monostearate malate**

RL: TEM (Technical or engineered material use); USES (Uses)  
(aq. pearlescent surfactant concs.)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



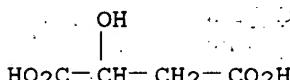
RN 236424-12-7 HCAPLUS

CN Butanedioic acid, hydroxy-, ester with 1,2,3-propanetriol monoocadecanoate (9CI) (CA INDEX NAME)

CM 1

CRN 6915-15-7

CMF C4 H6 Q5



CM 2

CBN 31566-31-1

CRN 31360-31-1  
CME C21 H42 Q4

CPI CZI  
CCT TDS

CC1 - TDS  
CDES - 8 - TD

1 CM 3

CRN 57-11-4

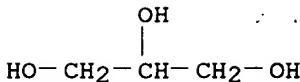
CMF C18 H36 O2



CM 4

CRN 56-81-5

CMF C3 H8 O3



L40 ANSWER 2 OF 42 HCAPLUS COPYRIGHT 2001 ACS  
 AN 2000:900298 HCAPLUS  
 DN 134:58244  
 TI Manufacture of aqueous concentrates of pearlescent (hydroxy)polycarboxylic acid amides  
 IN Nieendick, Claus; Eggers, Anke; Westfechtel, Alfred  
 PA Cognis Deutschland G.m.b.H., Germany  
 SO Eur. Pat. Appl. 16 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA German  
 IC ICM C11D001-52  
 ICS C11D001-65; C11D001-835; C11D001-645; C11D001-94; A61K007-00  
 CC 46-3 (Surface Active Agents and Detergents)  
 Section cross-reference(s): 62

FAN CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1061121	A1	20001220	EP 2000-112215	20000607
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 19927171	A1	20001221	DE 1999-19927171	19990615

PRAI DE 1999-19927171 19990615

OS MARPAT 134:58244

AB The title concs., useful in detergents and pharmaceutical and cosmetic formulations, comprise (a) (hydroxy)polycarboxylic acid amides R5R6NCOCH<sub>1</sub>CR<sub>2</sub>R<sub>3</sub>COR<sub>4</sub> [I; R<sub>1</sub>, R<sub>2</sub> = H, OH; R<sub>3</sub> = H, CO<sub>2</sub>H, CONR<sub>7</sub>R<sub>8</sub>; R<sub>4</sub> = OH, NR<sub>9</sub>R<sub>10</sub>; R<sub>5</sub>, R<sub>7</sub>, R<sub>9</sub> = H, C<sub>1-22</sub> alk(en)yl; R<sub>6</sub>, R<sub>8</sub>, R<sub>10</sub> = C<sub>1-22</sub> alk(en)yl; radicals R<sub>3</sub>-R<sub>9</sub> together contain ≥ 16 C atoms], (b) anionic, nonionic, cationic, ampholytic and/or zwitterionic emulsifiers 0.1-99, and (c) polyols, e.g., glycerol, polyethylene glycol, etc., 0-40%. I obtained by conversion of tartaric, citric and malic acid diesters with fatty amines are preferred. The preferred emulsifiers (b) are zwitterionic surfactants. For example, a title conc. used in hair shampoo contained tartaric acid N,N-di(coco alkyl)diimide 25, ethoxylated (4 EO) coco alcs. 5, coco alkyl glycoside 9, coco fatty acid betaine 5 and glycerol 5% in H<sub>2</sub>O.

ST pearlescent hydroxy polycarboxylic acid alkylamide aq conc shampoo; pearly luster aq conc hydroxy polycarboxylic acid alkylamide

IT Polyoxyalkylenes, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
 (coco alkyl ethers; manuf. of aq. concs. of pearlescent N,N-dialkylamides of (hydroxy)polycarboxylic acids, emulsifiers and polyols)

IT Betaines

RL: TEM (Technical or engineered material use); USES (Uses)  
 (coco fatty acid derivs.; manuf. of aq. concs. of pearlescent N,N-dialkylamides of (hydroxy)polycarboxylic acids, emulsifiers and polyols)

IT Pearly materials

Shampoos  
 (manuf. of aq. concs. of pearlescent N,N-dialkylamides of (hydroxy)polycarboxylic acids, emulsifiers and polyols)

IT Polyoxyalkylenes, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
 (manuf. of aq. concs. of pearlescent N,N-dialkylamides of (hydroxy)polycarboxylic acids, emulsifiers and polyols)

IT Emulsifying agents

(manuf. of aq. concs. of pearlescent N,N-dialkylamides of

(hydroxy)polycarboxylic acids, polyols and zwitterionic surfactants as)

IT Alcohols, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(polyhydric; manuf. of aq. concs. of pearlescent N,N-dialkylamides of (hydroxy)polycarboxylic acids, emulsifiers and)

IT Surfactants

(zwitterionic, emulsifiers; manuf. of aq. concs. of pearlescent N,N-dialkylamides of (hydroxy)polycarboxylic acids, polyols and)

IT 56-81-5, Glycerol, uses 57-55-6, 1,2-Propylene glycol,  
uses 107-41-5, Hexylene glycol 627-83-8, Ethylene glycol distearate  
6051-30-5D, Tartaric acid diamide, N,N-di(coco alkyl) derivs.  
25265-75-2, Butylene glycol 25322-68-3, Polyethylene glycol  
25322-68-3D, Polyethylene glycol, coco alkyl ethers

RL: TEM (Technical or engineered material use); USES (Uses)  
(manuf. of aq. concs. of pearlescent N,N-dialkylamides of (hydroxy)polycarboxylic acids, emulsifiers and polyols)

RE.CNT 7

RE

- (1) Ansmann, A; WO 9906514 A 1999 HCPLUS
- (2) Henkel Kgaa; DE 3843572 A 1990 HCPLUS
- (3) Henkel Kgaa; DE 4103551 A 1992 HCPLUS
- (4) Henkel Kgaa; DE 19622968 A 1997 HCPLUS
- (5) Kao Corp; JP 08231985 A 1996 HCPLUS

(6) Otsuka Pharma Co Ltd; EP 0500946 A 1992 HCPLUS

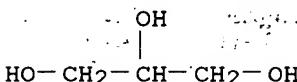
(7) Rhone Poulenc Inc; WO 9713498 A 1997 HCPLUS

IT 56-81-5, Glycerol, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(manuf. of aq. concs. of pearlescent N,N-dialkylamides of (hydroxy)polycarboxylic acids, emulsifiers and polyols)

RN 56-81-5 HCPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L40 ANSWER 3 OF 42 HCPLUS COPYRIGHT 2001 ACS

AN 2000:756381 HCPLUS

DN 133:323320

TI Toilet bowl sanitizers

IN Kahre, Joerg; Elsner, Michael; Hanke, Anja; Kischkel, Ditmar; Fabry, Bernd

PA Cognis Deutschland GmbH, Germany

SO Ger. Offen., 10, pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM C11D001-94

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19918185	A1	20001026	DE 1999-19918185	19990422
	WO 2000065005	A2	20001102	WO 2000-EP3297	20000413

W: JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE

PRAI DE 1999-19918185 19990422

OS MARPAT 133:323320

AB Flush-activated toilet cleaning gel compns. are based on (a) alkyl and/or alkenyl oligoglycoside, (b) alkyl and/or alkenyl (ether) sulfates and/or betaines, and (c) ethoxylated glycerol fatty acid esters. The compns. are bactericidal, have improved cleaning capacity, do

*Too New*

- not require thickeners, have good foaming ability, can incorporate considerable amts. of perfumes, and show a long operating life with complete flush-dispensing of ingredients. Examples contained Glucopon 650EC and/or 220UP, Texapon LS 35 and/or NSO, optionally Dehyton K, and PEG glyceryl stearate, isostearate, and/or behenate.

ST      toilet bowl sanitizer flush activated

IT      Glycosides

RL: TEM (Technical or engineered material use); USES (Uses)  
 (alkyl oligoglycosides; flush-activated toilet bowl sanitizing compns.  
 contg.)

IT      Surfactants

(anionic; flush-activated toilet bowl sanitizing compns. contg.)

IT      Fatty acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
 (esters, with triethoxylated glycerol; flush-activated toilet  
 bowl sanitizing compns. contg.)

IT      Betaines

RL: TEM (Technical or engineered material use); USES (Uses)  
 (flush-activated toilet bowl sanitizing compns. contg.)

IT      Surfactants

(nonionic; flush-activated toilet bowl sanitizing compns. contg.)

IT      Glycosides

RL: TEM (Technical or engineered material use); USES (Uses)  
 (oligoglycosides, alkenyl; flush-activated toilet bowl sanitizing  
 compns. contg.)

IT      Detergents

(toilet bowl cleaners; flush-activated toilet bowl sanitizing compns.)

IT      9004-82-4, Texapon NSO **53195-79-2**, 83138-08-3, Dehyton K,

**84101-04-2**, 152987-82-1, Texapon LS 35 177893-29-7, Glucopon

650EC 220385-22-8, Glucopon 220UP **303150-20-1**

RL: TEM (Technical or engineered material use); USES (Uses)  
 (flush-activated toilet bowl sanitizing compns. contg.)

IT      **53195-79-2 84101-04-2 303150-20-1**

RL: TEM (Technical or engineered material use); USES (Uses)  
 (flush-activated toilet bowl sanitizing compns. contg.)

RN      53195-79-2 HCPLUS

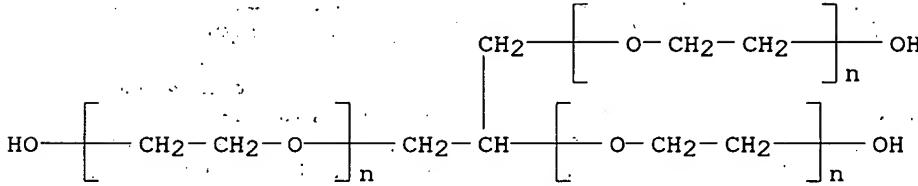
CN      Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''1,2,3-  
 propanetriyltris[.omega.-hydroxy-, mono{octadecanoate (9CI) (CA INDEX  
 NAME)}

CM      1

CRN    31694-55-0

CMF    (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>3</sub> H<sub>8</sub> O<sub>3</sub>

CCI    PMS



CM      2

CRN    57-11-4

CMF    C<sub>18</sub> H<sub>36</sub> O<sub>2</sub>

HO<sub>2</sub>C- (CH<sub>2</sub>)<sub>16</sub>-Me

RN      84101-04-2 HCPLUS

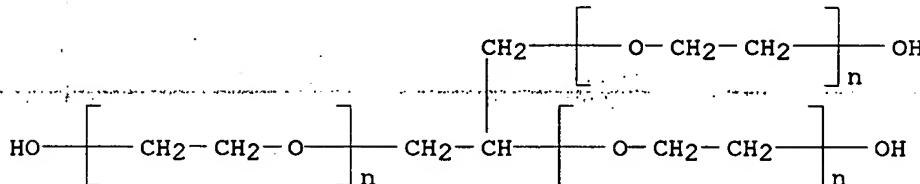
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxy-, monoisooctadecanoate (9CI) (CA INDEX NAME)

CM 1

CRN 31694-55-0

CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>3</sub> H<sub>8</sub> O<sub>3</sub>

CCI PMS



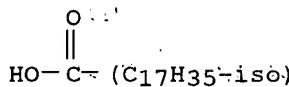
CM 2

CRN 30399-84-9

CMF C<sub>18</sub> H<sub>36</sub> O<sub>2</sub>

CCI IDS

CDES 8:ID, ISO 11:1,2-ethanediyl tris[.omega.-hydroxy-, monodocosanoate (9CI) (CA INDEX NAME)



RN 303150-20-1 HCPLUS

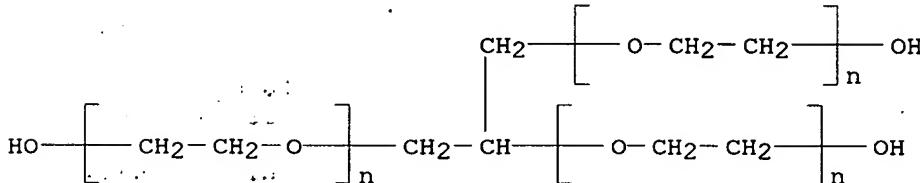
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxy-, monodocosanoate (9CI) (CA INDEX NAME)

CM 1

CRN 31694-55-0

CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>3</sub> H<sub>8</sub> O<sub>3</sub>

CCI PMS



CM 2

CRN 112-85-6

CMF C<sub>22</sub> H<sub>44</sub> O<sub>2</sub>

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>20</sub>-Me

L40 ANSWER 4 OF 42 HCPLUS COPYRIGHT 2001 ACS  
AN 2000:548783 HCPLUS

DN.

133:165462

TI Solid premixes for laundry rinsing aids

IN Schreiber, Manfred; Seliskar, Marjana

PA Clariant G.m.b.H., Germany

SO Ger. Offen., 4 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM D06M013-46

ICS D06M013-224

CC 46-6 (Surface Active Agents and  
Detergents)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI DE 19904234 A1 20000810 DE 1999-19904234 19990203

OS MARPAT 133:165462

AB The title compns., with good dispersibility, contain the quaternized betaines RCONH(CH<sub>2</sub>)<sub>a</sub>N(R<sub>1</sub>)(R<sub>1</sub>)CH<sub>2</sub>COOR+ A- [R = C<sub>1</sub>-21 alkyl(ene), R<sub>1</sub> = C<sub>1</sub>-4 alkyl, a = 1-3, A = anion] 50-90; polyol esters of specified structure 1-20; alkoxylated amines or diamines 1-20; ethylene glycol, 1,2-propanediol, or polyalkylene glycols (mol. wt. 200-4000) or their alkyl ethers 0-20%; and optionally acids. A suitable premix contained a quaternized betaine ester quat 75, ethoxylated (d.p. 3) C<sub>12</sub>-15 oxo alc. 5, ethoxylated stearylamine (d.p. 25) 5, and polyethylene glycol (mol. wt. 400) 15%.

ST laundry rinsing aid premix solid; betaine ester quat rinsing aid; ester polyol rinsing aid; stearylamine ethoxylated rinsing aid; amine alkoxylated rinsing aid; polyethylene glycol rinsing aid; polyoxyalkylene rinsing aid solid

IT Alcohols, uses

Amines, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(alkoxylated; solid premixes for laundry rinsing aids)

IT Polyoxyalkylenes, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(alkyl group-terminated; solid premixes for laundry rinsing aids)

IT Amines, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(diamines, alkoxylated; solid premixes for laundry rinsing aids)

IT Betaines

RL: TEM (Technical or engineered material use); USES (Uses)  
(ester quats; solid premixes for laundry rinsing aids)

IT Fatty acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(esters; solid premixes for laundry rinsing aids)

IT Detergents

(rinsing aids; solid premixes for laundry rinsing aids)

IT Polyoxyalkylenes, uses

Polyoxyalkylenes, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(solid premixes for laundry rinsing aids)

IT 56-81-5D, Glycerol, alkoxylated, fatty

acid esters .57-55-6, 1,2-Propanediol, uses 107-21-1, Ethylene glycol, uses 115-77-5D, Pentaerythritol, fatty acid diesters .25322-68-3, Polyethylene glycol 26635-92-7

RL: TEM (Technical or engineered material use); USES (Uses)  
(solid premixes for laundry rinsing aids)

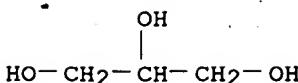
IT 56-81-5D, Glycerol, alkoxylated, fatty

acid esters

RL: TEM (Technical or engineered material use); USES (Uses)  
(solid premixes for laundry rinsing aids)

RN 56-81-5 HCPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L40 ANSWER 5 OF 42 HCPLUS COPYRIGHT 2001 ACS

AN 2000:57078 HCPLUS

DN 133:19121

TI Tensammetry of nonionic surfactants at solid-state electrodes. Correlation with other physicochemical parameters.

AU Buschmann, N.; Hulskotter, F.

CS Chair for Analytical Chemistry, University of Munster, Munster, Germany

SO Riv. Ital. Sostanze Grasse (1999), 76(10), 419-424

CODEN: RISGAD; ISSN: 0035-6808

PB Stazione Sperimentale per le Industrie degli Oli e dei Grassi

DT Journal

LA English

CC 46-3 (Surface Active Agents and Detergents)

AB The most important property of surface active agents is their ability to enrich on almost all surfaces or interfaces. Surfactants that adsorb on the surface of a charged metal electrode influence the electrochem. double layer (Helmholtz layer) between the metal surface and the soln. This area can be regarded as an elec. capacitor and thus a change of the elec. capacity of the electrode can be detd. by electrochem. methods like tensammetry. Tensammetry is a special voltammetric method that only measures the capacitive current, i.e., the capacity of the double layer. The adsorption behavior of different nonionic surfactants (alkyl ethoxylates, alkylphenyl ethoxylates, alkyl polyglucosides, sorbitan esters, and glycerol fatty acid partial esters) at charged metal electrodes was investigated tensammetrically. The results of this new method that allows kinetic measurements were correlated with those of other physicochem. methods like measurement of wetting time and dynamic surface tension. Tensammetry proved to be well suited for detg. dynamic physicochem. parameters of surfactant solns. Moreover, the method can easily be automated and thus it can simplify or even supplement other techniques.

ST tensammetry nonionic surfactant charged metal electrode; adsorption kinetics nonionic surfactant voltammetry capacitive current

IT Adsorption Kinetics

Wetting

(adsorption kinetics of nonionic surfactants by tensammetry at charged metal electrodes)

IT Polyoxyalkylenes, properties

RL: PRP (Properties)  
(alkyl and alkylphenyl ethers; adsorption kinetics of nonionic surfactants by tensammetry at charged metal electrodes)

IT Phenols, properties

RL: PRP (Properties)  
(alkyl; ethoxylated; adsorption kinetics of nonionic surfactants by tensammetry at charged metal electrodes)

IT Glycosides

RL: PRP (Properties)  
(alkyl; adsorption kinetics of nonionic surfactants by tensammetry at charged metal electrodes)

IT Alcohols, properties

RL: PRP (Properties)  
(ethoxylated; adsorption kinetics of nonionic surfactants by tensammetry at charged metal electrodes)

IT Surfactants

(nonionic; adsorption kinetics of nonionic surfactants by tensammetry at charged metal electrodes)

IT 56-81-5D, Glycerol, fatty acid

partial esters 9036-19-5, Marlophen 85 12441-09-7D, Sorbitan, esters 25322-68-3D, alkyl and alkylphenyl ethers

RL: PRP (Properties)

(adsorption kinetics of nonionic surfactants by tensammetry  
at charged metal electrodes)

RE.CNT 12

- RE
- (1) Anon; Alkyl Polyglucosides 1996, P146
  - (2) Anon; personal communication from Balzer D
  - (3) Bartolome, S; Melland Textilberichte 1950, V31, P489
  - (4) Gerlache, G; Talanta 1996, V43, P507
  - (5) Huls AG; Product data sheets Marlophen and Marlipal
  - (6) Jehring, H; Elektrosorptionsanalyse mit der Wechselstrompolarographie 1974, P252
  - (7) Jehring, H; Tenside 1969, V6, P251 HCPLUS
  - (8) Kiraly, Z; Langmuir 1997, V13, P3308 HCPLUS
  - (9) Kosswig, K; Die Tenside 1993, P148
  - (10) Schwuger, M; Lehrbuch der Grenzflächenchemie 1996, P237
  - (11) Van Os, N; Physico-chemical properties on selected anionic, cationic and nonionic surfactants 1993, P203
  - (12) Weil, J; JAOCs 1979, V56, P873 HCPLUS

IT 56-81-5D, Glycerol, fatty acid  
partial esters

RL: PRP (Properties)

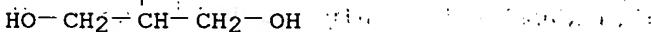
(adsorption kinetics of nonionic surfactants by tensammetry  
at charged metal electrodes)

RN 56-81-5 HCPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)

Adsorption kinetics of nonionic surfactants by tensammetry  
at charged metal electrodes

AS OH



L40 ANSWER 6 OF 42 HCPLUS COPYRIGHT 2001 ACS

AN 1999:819288 HCPLUS

DN 132:65775

TI Polyols having lipophilic substituents and preparation thereof for cold-processable thickeners for surfactant systems

IN Polovsky, Stuart Barry; Barbeito, Carmella; Li, Wing Kin; Diantonio, Edward F.; Kreeger, Russell Lowell

PA Union Carbide Chemicals & Plastics Technology Corp., USA

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM B01F017-00

CC 46-4 (Surface Active Agents and  
Detergents)

Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9967017	A1	19991229	WO 1999-US14072	19990622
	W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IS, JP, KR, KZ, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, TT, UA, US, UZ, VN, ZA, AM, AZ, BY, KG, KZ, MD, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 9947066	A1	20000110	AU 1999-47066	19990622

PRAI US 1998-90324 19980623

WO 1999-US14072 19990622

AB Title polyols, e.g., alkoxylated lipophilic polyol compds., esp.  
ethoxylated, esterified Me glucosides, in which gtoreq.5% of the polyol  
derivs. have about three moles of the lipophilic substituent per mol of  
polyol, can be dissolved in aq. solns. to provide liq. thickeners suitable

for thickening surfactant-contg. compns., e.g., shampoos, dishwashing liqs., coatings, etc., at cold processing temps. Thus, 192 g Glucam E 20 was dried 0.5 h at 140.degree. and .apprx.10 mm Hg with KOH, ethoxylated with 630 g ethylene oxide at 140-145.degree. and 65 psig, and digested 1 h to give hard, white, waxy PEG 100 Me glucoside, which (476 g) was melted, stirred with 4.4 g oxalic acid for .apprx.0.5 h, dried, reacted with 101 g Me oleate .apprx.5 h under vacuum, the pH adjusted to 6-7 with oxalic acid, and dried at 110.degree. and <5 mm Hg, giving a brown waxy solid having sapon. value 37.0 and hydroxy value 14.0, which was cooled to 80.degree. during addn of 566 g propylene glycol and 283 g H<sub>2</sub>O, and cooled with stirring to give a light brown soln. having viscosity .apprx.2000 cP. ST lipophilic ethoxylated polyol thickener surfactant; cold processable IT surfactant thickener; glucoside ethoxylated oleated thickener surfactant Fats and **Glyceridic oils, uses**  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(animal, reaction products with **alkoxylated glucose derivs.**; polyols having lipophilic substituents and prepn. thereof for cold-processable thickeners for **surfactant systems**)  
IT Cosmetics  
(cleansing, liqs.; polyols having lipophilic substituents and prepn. thereof for cold-processable thickeners for **surfactant systems**)  
IT **Fatty acids, uses**  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(esters, with **alkoxylated glucose derivs.**; polyols having lipophilic substituents and prepn. thereof for cold-processable thickeners for **surfactant systems**)  
IT Ethers, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(glycidyl, reaction products with **alkoxylated glucose derivs.**; polyols having lipophilic substituents and prepn. thereof for cold-processable thickeners for **surfactant systems**)  
IT **Surfactants**  
Thickening agents  
(polyols having lipophilic substituents and prepn. thereof for cold-processable thickeners for **surfactant systems**)  
IT Halides  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(reaction products with **alkoxylated glucose derivs.**; polyols having lipophilic substituents and prepn. thereof for cold-processable thickeners for **surfactant systems**)  
IT Epoxides  
**Fatty acids, uses**  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(reaction products, with **alkoxylated glucose derivs.**; polyols having lipophilic substituents and prepn. thereof for cold-processable thickeners for **surfactant systems**)  
IT Fats and **Glyceridic oils, uses**  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(vegetable, reaction products, with **alkoxylated glucose derivs.**; polyols having lipophilic substituents and prepn. thereof for cold-processable thickeners for **surfactant systems**)  
IT 112-62-9DP, Methyl oleate, reaction products with ethoxylated Me glucosides 68239-42-9DP, Glucam E 20, ethoxylated, reaction products with Me oleate 86893-19-8DP, Glucamate DOE 120, reaction products with Me oleate  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyols having lipophilic substituents and prepn. thereof for cold-processable thickeners for **surfactant systems**)  
IT 50-70-4D, Sorbitol, alkoxylated, reaction products with lipophilic compds.

- 50-99-7D, Glucose, alkoxylated, reaction products with lipophilic compds.
  - 56-81-5D, Glycerol, alkoxylated, reaction products with lipophilic compds. 5391-18-4D, Butyl glucoside, alkoxylated, reaction products with lipophilic compds. 34384-77-5D, alkoxylated, reaction products with lipophilic compds. 34625-23-5D, Ethyl glucoside, alkoxylated, reaction products with lipophilic compds. 66957-71-9D, alkoxylated, reaction products with lipophilic compds.
- RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
- (polyols having lipophilic substituents and prepn. thereof for cold-processable thickeners for surfactant systems)

RE.CNT 2

RE

- (1) Kinney, J; US 4450090 A 1984 HCPLUS  
 (2) Smolin, M; US 4687843 A 1987 HCPLUS

IT 56-81-5D, Glycerol, alkoxylated, reaction products with lipophilic compds.

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(polyols having lipophilic substituents and prepn. thereof for cold-processable thickeners for surfactant systems)

RN 56-81-5 HCPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)

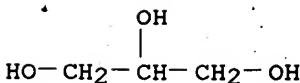
HO-OH D-Glucose, alkoxylated, react. with lipophilic compds. 5391-18-4D, Butyl glucoside, alkoxylated, reaction products with lipophilic compds. 34384-77-5D, alkoxylated, reaction products with lipophilic compds. 34625-23-5D, Ethyl glucoside, alkoxylated, reaction products with lipophilic compds. 66957-71-9D, alkoxylated, reaction products with lipophilic compds.

L40 ANSWER 7 OF 42 HCPLUS COPYRIGHT 2001 ACS  
 AN 1999:803131 HCPLUS  
 DN 132:51492  
 TI Softening finish compositions with good biodegradability  
 IN Kato, Toru; Ohtawa, Yasunori; Kaneko, Yohei  
 PA Kao Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM D06M013-352  
 ICS D06M013-402; D06M015-53  
 CC 46-5 (Surface Active Agents and Detergents)  
 Section cross-reference(s): 40

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11350348	A2	19991221	JP 1998-162328	19980610
OS MARPAT 132:51492				
AB Title compns. comprise (A) nonionic compds. having .gtoreq.1 C5-36 alkyl or alkenyl group and .gtoreq.1 ester bond and (B) amino compds. having .gtoreq.1 C5-36 alkyl or alkenyl group, which may contain ester bond, amide bond, or ether bond, or salts thereof. Thus, a cotton towel was washed and treated with a compn. comprising 4.5% reaction product of ethoxylated pentaerythritol and hardened beef tallow fatty acid, 0.5% N-(3-hardened beef tallow alkanoylaminopropyl)-N,N-dimethylamine, and HCl giving good softness.				
ST biodegradable softening finish compn nonionic compd; amino compd cotton towel softener; ethoxylated pentaerythritol hardened beef tallow fatty acid reaction product; methylamine beef tallow deriv hydrochloric acid salt softener compn				
IT Biodegradable materials				
Fabric softeners				
(biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)				

- IT. Amines, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)
- IT. **Surfactants**  
 (biodegradable; biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)
- IT. Textiles  
 (cotton, towels; biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)
- IT. Acrylic fibers, miscellaneous  
 RL: MSC (Miscellaneous)  
 (fabrics, jerseys; biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)
- IT. Polyoxyalkylenes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (hardened beef tallow derives.; biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)
- IT. **Surfactants**  
 (nonionic; biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)
- IT. Polyoxyalkylenes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (reaction products with hardened beef tallows; biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)
- IT. Tallow  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (reaction products, hardened; biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)
- IT. Amines, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (salts; biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)
- IT. Biodegradable materials  
 (surfactants; biodegradable fabric softener compns.  
 comprising nonionic compds. and amino compds.)
- IT. Fatty acids, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (tallow, reaction products; biodegradable fabric softener compns.  
 comprising nonionic compds. and amino compds.)
- IT. Household furnishings  
 (towels; biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)
- IT. **56-81-5D, Glycerol, reaction products with hardened beef tallow fatty acids, ethoxylated**  
 25322-68-3D, Polyethylene glycol, reaction products with hardened beef tallows . 42503-45-7D, Pentaerythritol ethoxylate, reaction products with hardened beef tallow **fatty acids** 58546-86-4D, USES ( )  
 1,3-Propanediamine hydrochloride, hardened beef tallow alkyl derives  
 65086-96-6D, hardened beef tallow alkyl derives  
 176158-74-0D, hardened beef tallow alkanoyl derives. 252850-69-4D,  
 hardened beef tallow alkanoyl derives. 252850-70-7 252850-71-8D,  
 reaction products with hardened beef tallow **fatty acids**  
 252850-72-9D, hardened beef tallow alkanoyl derives.  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)
- IT. **56-81-5D, Glycerol, reaction products with hardened beef tallow fatty acids, ethoxylated**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (biodegradable fabric softener compns. comprising nonionic compds. and amino compds.)
- RN 56-81-5 HCPLUS  
 CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L40 ANSWER 8 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1999:733026 HCAPLUS

DN 131:338649

TI Acaricidal carpet cleaning composition comprising esterified and non-esterified **ethoxylated glycerol** mixture

IN Zocchi, Germaine; Kong, Betty; Mondin, Myriam; Mahieu, Marianne

PA Colgate-Palmolive Co., USA

SO U.S., 9 pp., Cont.-in-part of U.S. Ser. No. 938,685.

CODEN: USXXAM

DT Patent

LA English

IC ICM C11D003-48

ICS C11D003-50; C11D003-60

NCL 510280000

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 24

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5985814	A	19991116	US 1998-109656	19980702
ZA 9405565	A	19960129	ZA 1994-5565	19940727
→ US 5610130	A	19970311	US 1996-650211	19960520
US 5942482	A	19990824	US 1997-938685	19970926
PRAI US 1993-102314		19930804		
US 1993-155317		19931122		
US 1994-192118		19940203		
US 1995-523562		19950905		
US 1996-553183		19960212		
US 1996-671471		19960628		
US 1997-938685		19970926		
US 1994-228538		19940415		
US 1995-381606		19950130		

OS MARPAT 131:338649

AB An improvement is described in the carpet compns. which is esp. effective in killing dust mites, contains an anionic detergent, an **ethoxylated glycerol** type compd., a hydrocarbon ingredient, at least one cosurfactant, an acaricidal agent, and water. The carpet cleaning formulation contained deionized water 80.93, C14-17 sodium paraffin sulfonate 3.92, esterified polyethoxy ether 1.15, magnesium sulfate heptahydrate 1.10, diethylene glycol monobutyl ether 2.00, stripped coconut oil fatty acids 0.37, 38% caustic soda 0.030, N-silicate (1:3.26) 0.20, perfume 0.21, hydrocarbon propellant mixt. 10.00, and benzyl benzoate 0.09%.

ST acaricidal carpet cleaning **ethoxylated glycerol**

IT Sulfonic acids, uses

RL: TEM (Technical or engineered material use); USES (Uses) (C13-17-alkanesulfonic, sodium salts; acaricidal carpet cleaning compn. comprising esterified and nonesterified **ethoxylated glycerol** mixt.)

IT Aldehydes, uses

RL: BAC (Biological activity or effector, except adverse); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses) (C6-14; acaricidal carpet cleaning compn. comprising esterified and nonesterified **ethoxylated glycerol** mixt.)

IT Fatty acids, uses

RL: MOA (Modifier or additive use); USES (Uses) (C8-22; acaricidal carpet cleaning compn. comprising esterified and nonesterified **ethoxylated glycerol** mixt.)

IT Acaricides

Carpets

Detergents

Timothy Saunders EIC-LAW Lib. 308-4139

- Propellants (sprays and foams)
- Surfactants**
  - (acaricidal carpet cleaning compn. comprising esterified and nonesterified **ethoxylated glycerol** mixt.)
- IT Silicates, uses
  - RL: TEM (Technical or engineered material use); USES (Uses)
    - (acaricidal carpet cleaning compn. comprising esterified and nonesterified **ethoxylated glycerol** mixt.)
- IT **Surfactants**
  - (anionic; acaricidal carpet cleaning compn. comprising esterified and nonesterified **ethoxylated glycerol** mixt.)
- IT Ethers, uses
  - RL: TEM (Technical or engineered material use); USES (Uses)
    - (glycol; acaricidal carpet cleaning compn. comprising esterified and nonesterified **ethoxylated glycerol** mixt.)
- IT 29387-86-8, Propylene glycol monobutyl ether
  - RL: TEM (Technical or engineered material use); USES (Uses)
    - (7acaricidal carpet cleaning compn. comprising esterified and nonesterified **ethoxylated glycerol** mixt.)
- IT 94-47-3, Phenyl ethyl benzoate 99-49-0, Carvone 100-52-7, Benzaldehyde, uses 118-55-8, Phenyl salicylate 119-36-8, Methyl salicylate 120-51-4, Benzyl benzoate 5392-40-5, Citral
  - RL: BAC (Biological activity or effector, except adverse); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
    - (acaricidal carpet cleaning compn. comprising esterified and nonesterified **ethoxylated glycerol** mixt.)
- IT 98-11-3D, Benzenesulfonic acid, C9-15 alkyl derivs., sodium salts
  - 111-76-2, Ethylene glycol monobutyl ether 112-34-5, Diethylene glycol monobutyl ether, 143-22-6, Triethylene glycol monobutyl ether
  - 1309-48-4, Magnesium oxide (MgO), uses 1320-67-8, Propylene glycol monomethyl ether 7487-88-9, Sulfuric acid magnesium salt, (1:1), uses 7786-30-3, Magnesium chloride (MgCl<sub>2</sub>), uses 10034-99-8, Magnesium sulfate heptahydrate 25498-49-1, TriPropylene glycol monomethyl ether
  - 31694-55-0 34590-94-8, DiPropylene glycol monomethyl ether
  - 35884-42-5, DiPropylene glycol monobutyl ether 55934-93-5, TriPropylene glycol monobutyl ether 80763-10-6, Propylene glycol mono-tert-butyl ether
- RL: TEM (Technical or engineered material use); USES (Uses)
  - (acaricidal carpet cleaning compn. comprising esterified and nonesterified **ethoxylated glycerol** mixt.)

RE.CNT 13

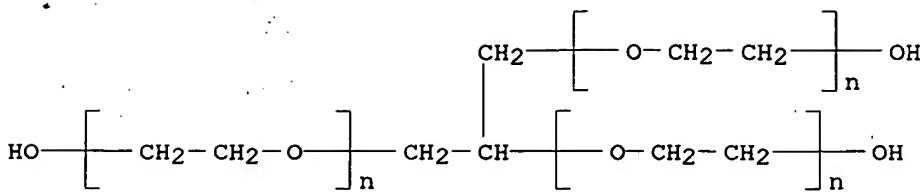
- RE
- (1) Anon; WO 89/12673 1989 HCAPLUS
  - (2) Bischoff; US 4666940 1987 HCAPLUS
  - (3) Chasin; US 4313847 1982 HCAPLUS
  - (4) Gauthier-Fournier; US 5529713 1996 HCAPLUS
  - (5) Mattox; US 4954338 1990 HCAPLUS
  - (6) Naik; US 4737520 1988 HCAPLUS
  - (7) Nonn; US 4564632 1986 HCAPLUS
  - (8) Pujol; US 5403509 1995 HCAPLUS
  - (9) Steltenkamp; US 4804683 1989 HCAPLUS
  - (10) Steltenkamp; US 5258408 1993 HCAPLUS
  - (11) Thomas; US 5610130 1997 HCAPLUS
  - (12) Zocchi; US 5095066 1992 HCAPLUS
  - (13) Zocchi; US 5719114 1998 HCAPLUS

IT 31694-55-0
 

- RL: TEM (Technical or engineered material use); USES (Uses)
  - (acaricidal carpet cleaning compn. comprising esterified and nonesterified **ethoxylated glycerol** mixt.)

RN 31694-55-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha,'-1,2,3-propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)



L40 ANSWER 9 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1999:549346 HCAPLUS

DN 131:186575

TI Stable rinse-cycle fabric softener composition with glycerol monostearate co-softener.

IN Pescador, José Javier Tovar; Hernandez, Salvador Jantes; Jacques, Alain

PA Colgate-Palmolive Company, USA

SO PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C11D003-00

ICS C11D001-835

CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9942547	A1	19990826	WO 1999-US3378	19990217
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6057285	A	20000502	US 1999-237528	19990127
	AU 9927692	A1	19990906	AU 1999-27692	19990217
	EP 975726	A1	20000202	EP 1999-908200	19990217
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI, RO				
	BR 9904829	A	20000523	BR 1999-4829	19990217
PRAI	US 1998-26194		19980219		
	US 1998-70453		19980430		
	US 1999-237528		19990127		
	WO 1999-US3378		19990217		
OS	MARPAT 131:186575				
AB	Stable and pourable title softeners contain a quaternary diester fabric softener, e.g., Me-quaternized triethanolamine di(tallow ester) quaternary ammonium salt in combination with glycerol monostearate and a fatty alc. ethoxylate nonionic surfactant as the emulsifier having an HLB value >7.5. For example, fabric softening emulsion contg. diester quat [RCO <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> N+Me(CH <sub>2</sub> CH <sub>2</sub> OH)CH <sub>2</sub> CH <sub>2</sub> O <sub>2</sub> CR]MeSO <sub>4</sub> - (R = tallow alkyl) 7.33, glycerol monostearate 1.38, Synperonic A-20 0.6, Dequest-2000 0.1, dye 0.002, CaCl <sub>2</sub> 0.05-0.5 and perfume 0.2-0.8% in H <sub>2</sub> O (prepn. given) had viscosity 84 cP after making and 250 cP after 6 wk at 43.degree., vs. 107 and 426 cP, resp., for similar softener stabilized with 0.60% ethoxylated (19 EO) C <sub>16</sub> -18 fatty alc. emulsifier instead of Synperonic A-20.				
ST	fabric softener triethanolamine esterquat viscosity ethoxylated fatty alc emulsifier; ethanolamine tallow diester quaternized salt fabric softener viscosity; glycerol monostearate cosoftener triethanolamine esterquat fabric softener				
IT	Alcohols, uses				
	RL: TEM (Technical or engineered material use); USES (Uses)				
	(C13-15, ethoxylated, surfactants, Synperonic A-20; stable rinse-cycle fabric softener compn: with glycerol				

IT monostearate co-softener)  
 IT Quaternary ammonium compounds, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (N,N,N-tris(hydroxyethyl)-N-Me, di(tallow esters), methosulfates;  
 stable rinse-cycle fabric softener compn. with **glycerol**  
 monostearate co-softener)  
 IT Fabric softeners  
 (N,N,N-tris(hydroxyethyl)-N-methylammonium salts, di(tallow esters'),  
 methosulfates; stable rinse-cycle fabric softener compn. with  
**glycerol** monostearate co-softener)  
 IT Fatty acids, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (esters, ditallow esters with triethanolamine, Me-quaternized,  
 methosulfates; stable rinse-cycle fabric softener compn. with  
**glycerol** monostearate co-softener).  
 IT Polyoxyalkylenes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (monoethers with C13-15 alcs., **surfactants**; stable  
 rinse-cycle fabric softener compn. with **glycerol** monostearate  
 co-softener)

IT **Surfactants**  
 (nonionic, **ethoxylated** fatty alcs.; stable rinse-cycle fabric  
 softener compn. with **glycerol** monostearate co-softener)

IT **31566-31-1, Glycerol monostearate**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (stable, rinse-cycle, fabric softener compn. with **glycerol**  
 monostearate co-softener).  
 IT 25322-68-3D, Polyethylene glycol, monoethers with C13-15 alcs.  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (**surfactants**; stable rinse-cycle fabric softener compn. with  
**glycerol** monostearate co-softener)

RE.CNT . 4

RE (1) Chang, N; US 5066414 A 1991 HCPLUS  
 (2) Henkel KGAA; DE 19623764 A 1997 HCPLUS  
 (3) Hoechst A; EP 0691396 A 1996 HCPLUS  
 (4) Mastrull, J; US 5747108 A 1998

IT **31566-31-1, Glycerol monostearate**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (stable rinse-cycle fabric softener compn. with **glycerol**  
 monostearate co-softener)

RN 31566-31-1 HCPLUS

CN Octadecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX  
 NAME)

CM 1

CRN 57-11-4  
 CMF C18 H36 O2

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>16</sub>—Me

CM 2

CRN 56-81-5  
 CMF C<sub>3</sub> H<sub>8</sub> O<sub>3</sub>

HO—CH<sub>2</sub>—CH—CH<sub>2</sub>—OH

AN 1998:414717 HCAPLUS

DN 129:69158

TI Light-duty liquid cleaning compositions comprising partially esterified polyhydric alcohol solubilizing agents

IN Adamy, Steven; Bedi, Sat; Mehreteab, Ammanuel; Thomas, Barbara

PA Colgate-Palmolive Co., USA

SO U.S., 6 pp. Cont.-in-part of U.S. 5,476,614.

CODEN: USXXAM

DT Patent

LA English

IC ICM C11D001-83

ICS C11D001-94

NCL 510235000

CC 46-6. (Surface Active Agents and Detergents)

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5767050	A	19980616	US 1995-540636	19951011
US 5476614	A	19951219	US 1995-373811	19950117
WO 9622347	A1	19960725	WO 1996-US157	19960116
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,				

TM, TR, RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,  
IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,  
NE, SN, TD, TG

AU 9646947 A1 19960807 AU 1996-46947 19960116

PRAI US 1995-373811 19950117

US 1995-540636 19951011

WO 1996-US157 19960116

OS MARPAT 129:69158

AB A high-foaming, light-duty, liq. detergents with good mildness to the human skin are based on ethoxylated C8-18 alkyl ether sulfate anionic surfactants and contain ethoxylated, partially esterified polyols as biodegradable solubilizing agents.

ST liq anionic detergent biodegradable solubilizing agent; polyol ethoxylated ester solubilizing agent detergent

IT Coco fatty acids

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(esters with polyethylene glycol ether with glycerol (3:1), Levenol F200; light-duty high-foaming liq. cleaning compns. contg. biodegradable partially esterified ethoxylated polyhydric alc. solubilizing agents)

IT Tallow fatty acids

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(esters with polyethylene glycol ether with glycerol (3:1), Levenol V-501/2; light-duty high-foaming liq. cleaning compns. contg. biodegradable partially esterified ethoxylated polyhydric alc. solubilizing agents)

IT Polyhydric alcohols

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(ethoxylated, fatty esters; light-duty high-foaming liq. cleaning compns. contg. biodegradable partially esterified ethoxylated polyhydric alc. solubilizing agents)

IT Polyoxyalkylenes, uses

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(glycerol ethers, fatty acid esters; light-duty high-foaming liq. cleaning compns. contg. biodegradable partially esterified ethoxylated polyhydric alc. solubilizing agents)

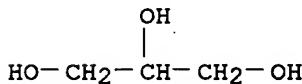


- EP 946498 A2 19991006 EP 1997-952862 19971202  
 R: DE, FR, GB, IT  
 US 6034257 A 20000307 US 1999-308669 19990603  
 PRAI DE 1996-19650107 19961203  
 DE 1996-19650151 19961203  
 WO 1997-EP6750 19971202
- AB** The title reaction mixts., which are commonly encountered in the large-scale aminolysis of glycerides, are acidified with aq. acids to pH 1-7 and the phases sepd. into a glycerol-contg. aq. phase and fatty amides-contg. org. phase. For example, a mixt. of 348.9 g MeNHCH<sub>2</sub>CH<sub>2</sub>OH and 27.0 g NaOMe (30% in MeOH) was treated over 80 min at 80.degree. with 1305.0 g rapeseed oil, the mixt. was stirred for 15 min, dild. with 1000 mL H<sub>2</sub>O, heating was discontinued and the whole acidified with HCl to pH 3-4 and the phases sepd. The org. phase was washed twice with 750 mL H<sub>2</sub>O and dewatered by distn. in vacuo to give rapeseed oil N-methylethanolamide as a viscous, brown oil. This (426.5 g) was combined with 9.0 g NaOMe, dried for 2 h at 120.degree./16 mbar and ethoxylated at that temp. with 132.0 g ethylene oxide (EO) (max pressure 3.5 bar), cooled to 80.degree. and evacuated to give viscous, brown oil free from EO, having OH no. 95 mg KOH/g and contg. 3.3% polyethylene glycol.
- ST** glycerin sepn fatty amide manuf; glyceride amidation glycerol sepn; rapeseed oil amidation methylethanolamine glycerol sepn; ethoxylation rapeseed oil N methylethanolamide
- IT** Polyoxyalkylenes, preparation  
 RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process) (ethers with fatty amides; procedure for sepn. of glycerin from reaction mixts. contg. glycerin and fatty acid amides)
- IT** Coco amides  
 RL: IMF (Industrial manufacture); PREP (Preparation) (ethoxylated; procedure for sepn. of glycerin from reaction mixts. contg. glycerin and fatty acid amides)
- IT** Polyoxyalkylenes, preparation  
 RL: IMF (Industrial manufacture); PREP (Preparation) (fatty amido group-terminated, rapeseed oil, ethoxylated; procedure for sepn. of glycerin from reaction mixts. contg. glycerin and fatty acid amides)
- IT** Amides, preparation  
 RL: IMF (Industrial manufacture); PREP (Preparation) (fatty, alkoxylation, rapeseed oil, ethoxylated; procedure for sepn. of glycerin from reaction mixts. contg. glycerin and fatty acid amides)
- IT** Nonionic surfactants  
 (procedure for sepn. of glycerin from fatty acid amides manufd. for use as)
- IT** Glycerides, processes  
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process) (rape-oil, aminolysis with amines; procedure for sepn. of glycerin from reaction mixts. contg. glycerin and fatty acid amides)
- IT** Rape oil  
 RL: IMF (Industrial manufacture); PREP (Preparation) (reaction products, with amines, ethoxylated; procedure for sepn. of glycerin from reaction mixts. contg. glycerin and fatty acid amides)
- IT** 124-41-4, Sodium methoxide  
 RL: CAT (Catalyst use); USES (Uses) (amidation and ethoxylation catalyst; procedure for sepn. of glycerin from reaction mixts. contg. glycerin and fatty acid amides)
- IT** 56-81-5, Glycerol, processes  
 RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); FORM (Formation, nonpreparative); PROC (Process) (procedure for sepn. of glycerin from reaction mixts. contg. glycerin)

and fatty acid amides)  
IT 74-89-5DP, Methylamine, amides with rapeseed oil fatty acids, ethoxylated 109-83-1DP, N-Methylethanolamine, amides with rapeseed oil fatty acids, ethoxylated 111-75-1DP, N-Butylethanolamine, amides with rapeseed oil fatty acids, ethoxylated 25322-68-3DP, Polyethylene glycol, ethers with fatty amides  
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)  
(procedure for sepn. of glycerin from reaction mixts. contg. glycerin and fatty acid amides)

IT 56-81-5, Glycerol, processes  
RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); FORM (Formation, nonpreparative); PROC (Process)  
(procedure for sepn. of glycerin from reaction mixts. contg. glycerin and fatty acid amides)

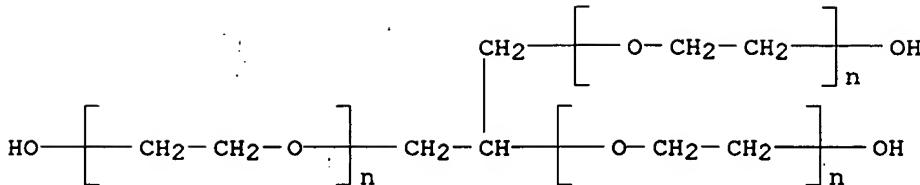
RN 56-81-5 HCAPLUS  
CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L40 ANSWER 12 OF 42, HCAPLUS, COPYRIGHT 2001 ACS  
AN 1998:210838 HCAPLUS  
DN 128:231908  
TI Microemulsion or liquid-crystal, all-purpose liquid disinfecting and cleaning compositions  
IN Blanvalet, Claude; Mondin, Myriam; Broze, Guy; Thomas, Barbara; Lambremont, Yves  
PA Colgate-Palmolive Co., USA  
SO PCT Int. Appl., 40 pp.  
CODEN: PIXXD2  
DT Patent.  
LA English  
IC ICM C11D017-00  
ICS C11D003-20; C11D001-83; C11D001-14; C11D001-74  
CC 46-6 (Surface Active Agents and Detergents)

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9813468	A1	19980402	WO 1997-US17401	19970926
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BE, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US	5861367	A	19990119	US 1996-722514	19960927
AU	9745991	A1	19980417	AU 1997-45991	19970926
AU	723559	B2	20000831		
EP	934400	A1	19990811	EP 1997-944515	19970926
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI, RO				
PRAI	US 1996-722514		19960927		
	US 1993-102314		19930804		
	US 1993-155317		19931122		
	US 1994-192118		19940203		
	US 1994-336936		19941115		
	US 1996-699299		19960819		
	WO 1997-US17401		19970926		
AB	Liq.-cryst. or microemulsion compns. that are more environmentally				

- friendly and are esp. effective in the removal of oily and greasy soil contain anionic surfactant 0.1-20, **glycerol alkoxylates** and(or) their carboxylate esters 0.1-20,  $\text{HCO}(\text{CH}_2)_n\text{CHO}$  0-10, water-insol. hydrocarbon or perfume 0.1-10, and cosurfactant 0.1-50%, with the balance being water. These compns. are effective in the absence of polyphosphate or other (in)org. builder salts and grease-removing solvents.
- ST **glycerol alkoxylate microemulsion detergent**  
disinfectant; phosphate free microemulsion detergent disinfectant; anionic surfactant microemulsion detergent disinfectant; hydrocarbon microemulsion detergent grease removing; perfume microemulsion detergent grease removing; aliph dialdehyde microemulsion detergent disinfectant; liq cryst disinfecting detergent; carboxylate **glycerol alkoxylate** microemulsion detergent
- IT **Alkanesulfonates**  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(C13-17, sodium salts; microemulsion or liq.-cryst. all-purpose liq. disinfecting and cleaning compns.)
- IT **Aliphatic aldehydes**  
RL: TEM (Technical or engineered material use); USES (Uses)  
(di-, microemulsion or liq.-cryst. all-purpose liq. disinfecting and cleaning compns.)
- IT **Coco fatty acids**  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(esters with polyethylene glycol ether with **glycerol** (3:1), Levenol F-200; microemulsion or liq.-cryst. all-purpose liq. disinfecting and cleaning compns.)
- IT **Carboxylic acids, uses**  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(esters, with **alkoxylated glycerol**; microemulsion or liq.-cryst. all-purpose liq. disinfecting and cleaning compns.)
- IT **Polyoxyalkylenes, uses**  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(ethers, with **glycerol**; microemulsion or liq.-cryst. all-purpose liq. disinfecting and cleaning compns.)
- IT **Anionic surfactants**
  - Disinfectants
  - Liquid crystals
  - Liquid detergents
  - Microemulsions
  - Perfumes  
(microemulsion or liq.-cryst. all-purpose liq. disinfecting and cleaning compns.)
- IT **Hydrocarbons, uses**  
Terpenes, uses  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(microemulsion or liq.-cryst. all-purpose liq. disinfecting and cleaning compns.)
- IT **31694-55-0D, Polyethylene glycol glycerol ether, esters with coco fatty acids**  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(microemulsion or liq.-cryst. all-purpose liq. disinfecting and cleaning compns.)
- IT **31694-55-0D, Polyethylene glycol glycerol ether, esters with coco fatty acids**  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(microemulsion or liq.-cryst. all-purpose liq. disinfecting and cleaning compns.)
- RN **31694-55-0 HCPLUS**
- CN **Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.'-1,2,3-propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)**



L40 ANSWER 13<sup>rd</sup> OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1998:204302 HCAPLUS

DN 128:231902

TI Microemulsion liquid crystal and cleaning compositions comprising esterified and non-esterified **ethoxylated glycerol** mixture and sulfoxy anionic surfactant

IN Mondin, Myriam; Loth, Myriam; Broze, Guy; Mehreteab, Ammanuel; Thomas, Barbara; Adamy, Steven; Bala, Frank, Jr.

PA Colgate-Palmolive Co., USA

SO U.S., 17 pp. Cont.-in-part of U.S. 5,593,958.

CODEN: USXXAM

DT Patent

LA English

IC ICM C11D017-00

ICS C11D001-74; C11D001-83

NCL 510417000

CC 46-6 (**Surface Active Agents and Detergents**)

FAN.CNT 24

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 57312814	A	19980324	US 1996-714906	19960917
	ZA 9405565	A	19960129	ZA 1994-5565	19940727
	US 5593958	A	19970114	US 1995-385212	19950205
	US 5610130	A	19970311	US 1996-650211	19960520

PRAI US 1993-102314, 19930804  
 US 1993-155317 19931122  
 US 1994-192118 19940203  
 US 1995-385212 19950205  
 US 1994-228538 19940415  
 US 1995-381606 19950130

OS MARPAT 128:231902

AB The title compns. effective in the removal of oily and greasy soil contain an anionic detergent, an **ethoxylated glycerol** type compd., a hydrocarbon ingredient, at least one cosurfactant, and water which comprises the use of a water-insol. odoriferous perfume as the essential hydrocarbon ingredient in a proportion sufficient to form a dil. o/w microemulsion compn. contg. 1-20% anionic surfactants, 0.1-50% cosurfactant(s), 0.1-20% **ethoxylated glycerol** compds., 0.4-10% perfume and the balance being water. A degreasing compn. comprised Na C13-17 paraffinsulfonate 4.7, Levenol F-200 2.3, diethylene glycol monobutyl ether 4, fatty acid 0.75, MgSO4.7H2O 2.2, perfume (contg. 25% terpenes) 0.8 and water to 100%.

ST microemulsion liq crystal cleaning compn; **alkoxylated glycerin** microemulsion degreasing compn

IT **Ethoxylated alcohols**

RL: TEM (Technical or engineered material use); USES (Uses)  
 (C14-15; microemulsion liq. crystal and cleaning compns. comprising esterified and non-esterified **ethoxylated glycerol** mixt. and sulfoxy anionic surfactant)

IT Carboxylic acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
 (dicarboxylic; microemulsion liq. crystal and cleaning compns. comprising esterified and non-esterified **ethoxylated glycerol** mixt. and sulfoxy anionic surfactant)

## IT. Coco fatty acids

RL: TEM (Technical or engineered material use); USES (Uses)  
 (esters with polyethylene glycol ether with glycerol (3:1),  
 Levenol F 200; microemulsion liq. crystal and cleaning compns.  
 comprising esterified and non-esterified ethoxylated  
 glycerol mixt. and sulfoxy anionic surfactant)

## IT Tallow fatty acids

RL: TEM (Technical or engineered material use); USES (Uses)  
 (esters with polyethylene glycol ether with glycerol (3:1),  
 Levenol V 501/2; microemulsion liq. crystal and cleaning compns.  
 comprising esterified and non-esterified ethoxylated  
 glycerol mixt. and sulfoxy anionic surfactant)

## IT Anionic surfactants

Degreasing agents

## Detergents

## Liquid crystals

(microemulsion liq. crystal and cleaning compns. comprising esterified  
 and non-esterified ethoxylated glycerol mixt. and  
 sulfoxy anionic surfactant)

## IT Alkoxy alcohols

Carboxylic acids, uses

Polyoxyalkylenes, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
 (microemulsion liq. crystal and cleaning compns. comprising esterified  
 and non-esterified ethoxylated glycerol mixt. and  
 sulfoxy anionic surfactant)

## IV Tallow fatty acids

RL: TEM (Technical or engineered material use); USES (Uses)  
 (soap; microemulsion liq. crystal and cleaning compns.  
 comprising esterified and non-esterified ethoxylated  
 glycerol mixt. and sulfoxy anionic surfactant)

## IT 71-41-0, 1-Pentanol, uses 79-09-4, Propionic acid, uses 79-10-7,

Acrylic acid, uses 110-15-6, Succinic acid, uses 110-94-1, Glutaric  
 acid 111-76-2, Ethylene glycol monobutyl ether 112-34-5, Diethylene  
 glycol monobutyl ether 112-40-3, Dodecane 112-59-4, Diethylene glycol  
 monohexyl ether 124-04-9, Adipic acid, uses 143-22-6, TriEthylene  
 glycol monobutyl ether 151-21-3, Sodium lauryl sulfate, uses  
 1320-67-8, Propylene glycol monomethyl ether 1639-66-3, Dioctyl  
 sodiosulfosuccinate 3097-08-3, Magnesium lauryl sulfate 7487-88-9,  
 Magnesium sulfate, uses 25322-68-3, PEG300 25498-49-1, TriPropylene  
 glycol monomethyl ether 29911-28-2 31694-55-0D, Polyethylene  
 glycol glycerin ether, coco alkyl ethers 34590-94-8,  
 Dipropylene glycol monomethyl ether 55934-93-5, Tripropylene glycol  
 monobutyl ether 80763-10-6, Propylene glycol mono-tert-butyl ether

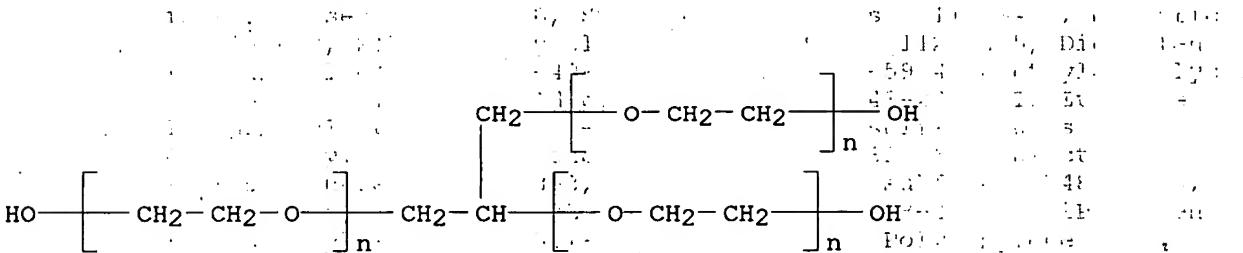
RL: TEM (Technical or engineered material use); USES (Uses)  
 (microemulsion liq. crystal and cleaning compns. comprising esterified  
 and non-esterified ethoxylated glycerol mixt. and  
 sulfoxy anionic surfactant)

IT 31694-55-0D, Polyethylene glycol glycerin ether, coco  
 alkyl ethers

RL: TEM (Technical or engineered material use); USES (Uses)  
 (microemulsion liq. crystal and cleaning compns. comprising esterified  
 and non-esterified ethoxylated glycerol mixt. and  
 sulfoxy anionic surfactant)

## RN 31694-55-0 HCPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.'-1,2,3-  
 propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)



AN 1997:613824 HCAPLUS

DN 127:236027

TI Cleaning compositions comprising mixtures of partially esterified, fully esterified, and non-esterified ethoxylated polyhydric alcohols and N-alkyl aldonamide surfactant

IN Durbut, Patrick

PA Colgate-Palmolive Co., USA

SO U.S., 10 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM C11D017-00

ICS C11D001-74; C11D003-32

NCL 510365000

CC 46-6 (Surface Active Agents and Detergents)

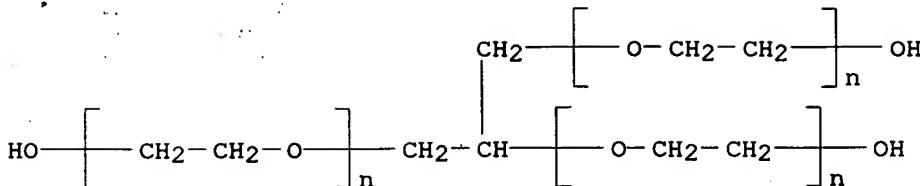
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5665689	A	19970909	US 1996-708379	19960904
	WO 9810048	A2	19980312	WO 1997-US15185	19970828
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9742396	A1	19980326	AU 1997-42396	19970828

PRAI US 1996-708379, 19960904  
WO 1997-US15185, 19970828AB A cleaning compn. contains 0.1-10% an N-alkyl aldonamide surfactant such as N-octyl ribonamide, 0.5-40% partially esterified **ethoxylated glycerol** surfactants such as Levanol F-200, 0.5-8% solubilizer and balance H2O.ST alkyl aldonamide cleaning compn; **ethoxylated glycerol** surfactant cleaning compn; ester **ethoxylated glycerol** surfactant; water based cleaning compn surfactantIT **Detergents**  
(cleaning compns. comprising mixts. of partially esterified, fully esterified, and non-esterified ethoxylated polyhydric alcs. and N-alkyl aldonamide **surfactant**)IT **Coco fatty acids**RL: TEM (Technical or engineered material use); USES (Uses)  
(esters with polyethylene glycol ether with **glycerol** (3:1);  
cleaning compns. comprising mixts. of partially esterified, fully esterified, and non-esterified **ethoxylated polyhydric alcs.**  
and N-alkyl aldonamide **surfactant**)IT 31694-55-0D, Polyethylene glycol **glycerin ether, esters**  
98241-30-6, N-Decyl ribonamide, 102404-77-3, N-Octyl ribonamide  
RL: TEM (Technical or engineered material use); USES (Uses)  
(cleaning compns. comprising mixts. of partially esterified, fully esterified, and non-esterified **ethoxylated polyhydric alcs.**  
and N-alkyl aldonamide **surfactant**)IT 31694-55-0D, Polyethylene glycol **glycerin ether, esters**  
RL: TEM (Technical or engineered material use); USES (Uses)  
(cleaning compns. comprising mixts. of partially esterified, fully esterified, and non-esterified **ethoxylated polyhydric alcs.**  
and N-alkyl aldonamide **surfactant**)

RN 31694-55-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)



L40 ANSWER 15 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1997:124901 HCAPLUS

DN 126:200935

TI Cleaning composition in microemulsion or liquid crystal form comprising mixture of partially esterified, fully esterified and non-esterified polyhydric alcohols

IN Mondin, Myriam; Loth, Myriam; Broze, Guy; Thomas, Barbara; Adamy, Steven; Bala, Frank, Jr.; Mehreteab, Ammanuel

PA Colgate-Palmolive Co., USA

SO U.S., 13 pp. Cont.-in-part of U.S. Ser. No. 182,523, abandoned.

CODEN: USXXAM

DT Patent

LA English

IC ICM C11D017-00

ICS C11D001-74; C11D001-83

NCL 510417000

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 24

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5599785	A	19970204	US 1994-336932	19941115
	ZA 9405565	A	19960129	ZA 1994-5565	19940727
	CA 2205404	AA	19960523	CA 1995-2205404	19951109
	WO 9615217	A1	19960523	WO 1995-US14583	19951109
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9641059	A1	19960606	AU 1996-41059	19951109
	AU 696196	B2	19980903		
	EP 791049	A1	19970827	EP 1995-939106	19951109
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
	BR 9509682	A	19970930	BR 1995-9682	19951109
	CN 1170433	A	19980114	CN 1995-196880	19951109
	HU 77481	A2	19980528	HU 1997-2416	19951109
	EP 994180	A1	20000419	EP 1999-204486	19951109
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE				
	US 5610130	A	19970311	US 1996-650211	19960520
PRAI	US 1993-102314		19930804		
	US 1993-155317		19931122		
	US 1994-182523		19940118		
	US 1994-228538		19940415		
	US 1994-336932		19941115		
	US 1994-336936		19941115		
	US 1995-381606		19950130		
	US 1995-385212		19950205		
	EP 1995-939106		19951109		
	WO 1995-US14583		19951109		

OS MARPAT 126:200935

AB The liq. crystal compn. or the microemulsion compn., which is esp. effective in the removal of oily and greasy soil and leaving a shiny appearance, contains an anionic detergent, an ethoxylated glycerol type compd., a hydrocarbon ingredient, and H2O which

comprises the use of a water-insol. odoriferous perfume as the essential hydrocarbon ingredient in proportions sufficient to form a dil. o/w microemulsion compn. contg. 1-20% an anionic detergent, 0.1-50% cosurfactant, 0.1-10% **ethoxylated glycerol** type compd., 0-1.0% tri-alkyl citrate, 0.4-10% perfume and the balance being H<sub>2</sub>O. A typical o/w emulsion comprises coco fatty acid 4, Na C13-17 paraffin sulfonate 20.75, Levenol F-200 12, diethylene glycol monobutyl ether 20, perfume 12.5%, and the balance water.

ST anionic surfactant all purpose cleaner; **ethoxylated glycerol** all purpose cleaner; perfume all purpose cleaner; ether cosurfactant all purpose cleaner

IT Sulfonates  
RL: TEM (Technical or engineered material use); USES (Uses)  
(alkenésulfonates, C13-17, sodium salts, **surfactant**; cleaning compn. in microemulsion or liq. crystal form comprising mixt. of partially esterified, fully esterified and non-esterified polyhydric alcohols)

IT Perfumes  
(cleaning compn. in microemulsion or liq. crystal form comprising mixt. of partially esterified, fully esterified and non-esterified polyhydric alcohols)

IT Coco fatty acids  
**Fatty acids**, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(cleaning compn. in microemulsion or liq. crystal form comprising mixt. of partially esterified, fully esterified and non-esterified polyhydric alcohols)

IT Detergents  
(cleaning compns.; in microemulsion or liq. crystal form comprising mixt. of partially esterified, fully esterified and non-esterified polyhydric alcohols)

IT Coco fatty acids  
Tallow fatty acids  
RL: TEM (Technical or engineered material use); USES (Uses)  
(esters with polyethylene glycol ether with **glycerol** (3:1); cleaning compn. in microemulsion or liq. crystal form comprising mixt. of partially esterified, fully esterified and non-esterified polyhydric alcohols)

IT Alkenes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(sulfonates, C13-17, sodium salts, **surfactant**; cleaning compn. in microemulsion or liq. crystal form comprising mixt. of partially esterified, fully esterified and non-esterified polyhydric alcohols)

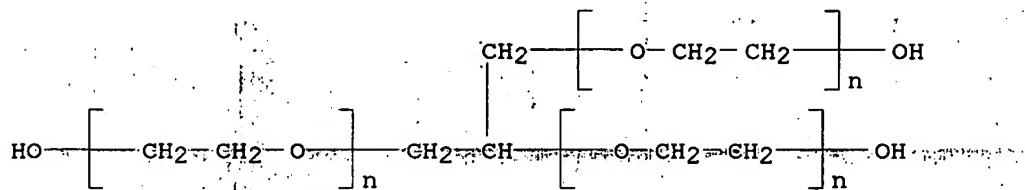
IT Fatty acid esters  
RL: TEM (Technical or engineered material use); USES (Uses)  
(tallow, esters with polyethylene glycol ether with **glycerol** (3:1); cleaning compn. in microemulsion or liq. crystal form comprising mixt. of partially esterified, fully esterified and non-esterified polyhydric alcohols)

IT 71-41-0, 1-Pentanol, uses 77-94-1, Tri-n-butyl citrate 112-34-5, Diethylene glycol monobutyl ether 112-40-3, Dodecane 3097-08-3, Magnesium lauryl sulfate 31694-55-0D, fatty ester derivs.  
RL: TEM (Technical or engineered material use); USES (Uses)  
(cleaning compn. in microemulsion or liq. crystal form comprising mixt. of partially esterified, fully esterified and non-esterified polyhydric alcohols)

IT 79-09-4, Propanoic acid, uses 79-10-7, 2-Propenoic acid, uses 110-94-1, Pentanedioic acid 111-76-2, Ethylene glycol monobutyl ether 143-22-6, Triethylene glycol monobutyl ether 29387-86-8, Propylene glycol monobutyl ether 29911-28-2 55934-93-5, Tripropylene glycol monobutyl ether 80763-10-6, Propylene glycol tert-butyl ether  
RL: TEM (Technical or engineered material use); USES (Uses)  
(cosurfactant; cleaning compn. in microemulsion or liq. crystal form comprising mixt. of partially esterified, fully esterified and non-esterified polyhydric alcohols)

IT 31694-55-0D, fatty ester derivs.

RL: TEM (Technical or engineered material use); USES (Uses)  
 (cleaning compn. in microemulsion or liq. crystal form comprising mixt.  
 of partially esterified, fully esterified and non-esterified polyhydric  
 alcohols)  
 RN 31694-55-0 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.,:alpha.'',.alpha.''-1,2,3-  
 propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)



L40 ANSWER 16 OF 42 HCAPLUS COPYRIGHT 2001 ACS  
 AN 1996:659273 HCAPLUS.  
 DN 125:279256  
 TI Manufacture of high-density, granular detergent compositions  
 IN Krings, Peter; Pastura, Amerigo; Behler, Ansgar; Greger, Manfred;  
 Foerster, Thomas; Boecker, Monika; Sandkuehler, Peter; Pfennig-Dahmen,  
 Renate (Technische Universität Berlin, Institut für Chemie, FRG, Germany)  
 PA Henkel Kgaa, Germany  
 SO Ger. Offen. 16 pp, 1996-EP994, 1996-EP994, 1996-EP994  
 CODEN: GWXXBX  
 DT Patent 5-0 1996-EP994  
 LA German  
 IC ICM C11D001-83  
 ICS C11D017-00  
 CC 46-5 (Surface Active Agents and  
 Detergents)  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19509752	A1	19960919	DE 1995-19509752	19950317
	WO 9629389	A1	19960926	WO 1996-EP994	19960308
	W: JP, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 815196	A1	19980107	EP 1996-906756	19960308
	EP 815196	B1	19990811		
	R: AT, BE, DE, ES, FR, GB, IT, NL				
	AT 183230	E	19990815	AT 1996-906756	19960308
	ES 2136391	T3	19991116	ES 1996-906756	19960308
PRAI	DE 1995-19509752	19950317			
	WO 1995-EP4950	19951214			
	WO 1996-EP994	19960308			
AB	Laundry detergent strand or pellet compns. with improved dissolving and rinsing properties are manufd. by extrusion or tabletting of premixes comprising solid anionic surfactants, builders and alkalizing agents as solid components and nonionic surfactants as liq. components. The latter components comprise >50% of alkoxylated fatty acid alkyl ethers R1CO2(AO)mR2 [R1 = C5-21 alk(en)yl; R2 = H, C1-6 alkyl; AO = C2-4 alkylene oxide unit; m = 1-60] or esters R3[O(AO)n]CH2CHO[(AO)oR4]CH2O(AO)pR5 [R3-R5 = H, COR6; R6 = C5-21 alk(en)yl; R3 = R4 = R5 .noteq. H; n, o, p = 1-60]. Thus, compns. contg. C12-18 alkylbenzenesulfates, ethoxylated C12-18 fatty acid Me esters, Na soap, polyethylene glycol, zeolite, polycarboxylates, Na water glass, bleach activator, protease, lipase, perfume, and silicone defoamer in H2O had better dissoln. and rinsing properties than control compns. contg. ethoxylated fatty alc. Na salts instead of ethoxylated fatty acid esters.				
ST	detergent granular high density compn; granular detergent dissolving rate; alkoxylated fatty ester additive granular detergent; anionic nonionic surfactant granular detergent dissoln				

IT. **Fatty acids, uses**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (C12-18, ethoxylated, Me, Et and Bu esters; manuf. of high-d., granular detergent compns.)

IT. **Surfactants**  
 (anionic, manuf. of high-d., granular detergent compns.)

IT. **Detergents**  
 (laundry, granular, high-d.; manuf. of high-d., granular detergent compns.)

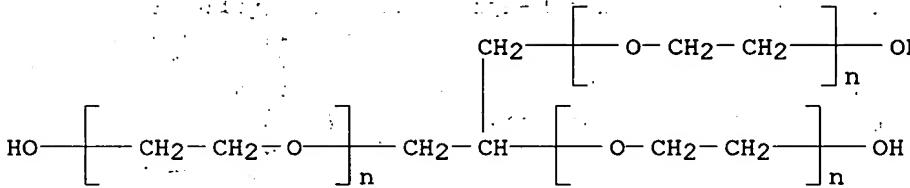
IT. **Glycerides, uses**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (mono-, ethoxylated, C12-18-soya; manuf. of high-d., granular detergent compns.)

IT. **Surfactants**  
 (nonionic, manuf. of high-d., granular detergent compns.)

IT. 98-11-3D, Benzenesulfonic acid, C11-13 alkyl derivs. 7664-93-9D,  
 Sulfuric acid, esters with C12-18 alcs. 9004-74-4D, Polyethylene glycol  
 methyl ether, esters with C12-18 fatty acids  
 9004-77-7D, Polyethylene glycol butyl ether, esters with C12-18  
 fatty acids 27879-07-8D, Polyethylene glycol ethyl  
 ether, esters with C12-18 fatty acids  
**31694-55-0D**, triesters with soya fatty acids  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (manuf. of high-d., granular detergent compns.)

IT. **31694-55-0D**, triesters with soya fatty acids  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (manuf. of high-d., granular detergent compns.)

RN. 31694-55-0 HCPLUS  
 CN. Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.'-1,2,3-  
 propanetriyltris(.omega.-hydroxy- (9CI) (CA INDEX NAME)



L40 ANSWER 17 OF 42 HCPLUS COPYRIGHT 2001 ACS  
 AN 1996:590473 HCPLUS  
 DN 125:225160  
 TI Process for the manufacture of granular detergent compositions comprising nonionic surfactant  
 IN Donoghue, Scott John; Smith, David John  
 PA Procter and Gamble Company, USA  
 SO PCT Int. Appl., 52 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C11D001-66  
 ICS C11D001-83; C11D003-37; C11D011-00; C11D017-00; B29B009-00  
 CC 46-5 (Surface Active Agents and Detergents)

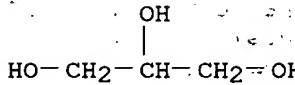
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9623048	A1	19960801	WO 1996-US527	19960105
	W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI			
	RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,			

NE, SN

CA 2208675	AA 19960801	CA 1996-2208675	19960105
AU 9647570	A1 19960814	AU 1996-47570	19960105
BR 9606932	A 19971111	BR 1996-6932	19960105
EP 805845	A1 19971112	EP 1996-903497	19960105
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE			
ZA 9600506	A 19960813	ZA 1996-506	19960123
US 5858957	A 19990112	US 1997-875257	19970923
PRAI EP 1995-300490	19950126		
EP 1995-301692	19950314		
WO 1996-US527	19960105		
AB A process for manuf. of detergent compns. from a surfactant paste which is a solid at 25 degree. and below, comprises: mixing the paste at a temp. above its softening point, the paste comprising at least 50% of nonionic surfactant; forming the molten paste into drops on a cooling surface; forming solid pastilles by cooling the drops; and removing solidified pastilles from the cooling surface. The surfactants may be one of: ethoxylated nonionic surfactants, glycerol ethers, glucosamides, glycerol amides, glycerol esters, fatty acids, fatty acid esters, fatty amides, alkyl polyglycosides, alkyl polyglycol ethers, ethoxylated alkyl phenols, and their mixts. A paste comprises preferably a mixt. of polyhydroxy fatty acid amide and an ethoxylated nonionic surfactant in 3:7 to 7:3 ratio and one of polymeric carboxylates, polyethylene glycals, polyaspartates, and polyglutamates as dispersing agents. The process is also suitable for prodn. of pastillated granulated detergent compns. or components. Thus, a C16-18 N-Me glucamide was prep'd. in the presence of, a C12-14 ethoxylated nonionic surfactant [5 ethylene oxide per mol of alc.]. The surfactant mixt. was mixed with C12-16 alkyl sulfate powder and a hydrogenated fatty acid obtain a paste. Drops of paste of approx. 1 mm diam. were formed on a cooled conveyor belt, and the solidified pastilles were removed from the belt and dusted with zeolite A in a drum mixer. The bulk d. of the finished pastillated compn. was about 450 g/L. The process provides for prodn. of nonionic surfactant-rich pastes and of granular detergents with high surfactant activity and substantially dust free.			
ST nonionic surfactant paste manuf granular detergent; ethoxylated alc alkyl sulfate powder surfactant			
IT Dispersing agents (process for manuf. of nonionic surfactant-rich pastes and granular detergent compns.)			
IT Zeolites, uses RL: NUU (Nonbiological use, unclassified); USES (Uses) (A, process for manuf. of nonionic surfactant-rich pastes and granular detergent compns.)			
IT Amines, uses RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (N-oxides, alkyl and hydroxyalkyl and alkylphenyl derivs.; process for manuf. of nonionic surfactant-rich pastes and granular detergent compns.)			
IT Fatty acids, uses RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (esters, process for manuf. of nonionic surfactant-rich pastes and granular detergent compns.)			
IT Alcohols, uses RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (ethoxylated, process for manuf. of nonionic surfactant-rich pastes and granular detergent compns.)			
IT Amides, uses RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (fatty, process for manuf. of nonionic surfactant-rich pastes and granular detergent compns.)			
IT Detergents (granular, process for manuf. of nonionic surfactant-rich			

IT      pastes and granular detergent compns.)  
**Fatty acids**, uses  
 RL: PEP (Physical, engineering or chemical process); TEM (Technical or  
 engineered material use); PROC (Process); USES (Uses)  
 (hydrogenated, process for manuf. of nonionic surfactant-rich  
 pastes and granular detergent compns.)  
**IT      Surfactants**  
 (nonionic, process for manuf. of nonionic surfactant-rich  
 pastes and granular detergent compns.)  
**IT      7664-93-9, Sulfuric acid, uses**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (alkyl derivs.; process for manuf. of nonionic surfactant  
 -rich pastes and granular detergent compns.)  
**IT      56-81-5D, Glycerol, ethers and esters and amides**  
 56-86-0D, Glutamic acid, polymers 107-21-1D, Ethylene glycol, Ph ethers  
 25322-68-3; Polyethylene glycol 25608-40-6D, Polyaspartic acid, polymers  
 RL: PEP (Physical, engineering or chemical process); TEM (Technical or  
 engineered material use); PROC (Process); USES (Uses)  
 (process for manuf. of nonionic surfactant-rich pastes and  
 granular detergent compns.)  
**IT      98-11-3D, Benzenesulfonic acid, alkyl derivs. 10543-57-4, Tetraacetyl  
 ethylene diamine**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (process for manuf. of nonionic surfactant-rich pastes and  
 granular detergent compns.)  
**IT      56-81-5D, Glycerol, ethers and esters and amides**  
 RL: PEP (Physical, engineering or chemical process); TEM (Technical or  
 engineered material use); PROC (Process); USES (Uses)  
 (process for manuf. of nonionic surfactant-rich pastes and  
 granular detergent compns.)  
**RN      56-81-5, HCPLUS**  
**CN      1,2,3-Propanetriol (9CI) (CA INDEX NAME)**



L40 ANSWER 18 OF 42 HCPLUS COPYRIGHT 2001 ACS  
 AN 1996:388618 HCPLUS  
 DN 125:118121  
 TI Microemulsion light-duty liquid cleaning compositions  
 IN Erilli, Rita  
 PA Colgate-Palmolive Co, USA  
 SO U.S., 8 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM: C11D003-30  
 ICS: C11D001-62; C11D003-44  
 NCL 252550000  
 CC 46-6 (Surface Active Agents and  
 Detergents)

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5523025	A	19960604	US 1995-392569	19950223
	US 5646104	A	19970708	US 1995-539925	19951006
	CA 2213626	AA	19960829	CA 1996-2213626	19960220
	WO 9626262	A1	19960829	WO 1996-US2203	19960220

W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,  
 GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD,  
 MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,  
 TM, TR  
 RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,

IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,  
 NE, SN, TD, TG  
 AU 9649272 A1 19960911 AU 1996-49272 19960220  
 AU 698866 B2 19981112  
 EP 815194 A1 19980107 EP 1996-905540 19960220  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE  
 US 6034049 A 20000307 US 1997-893555 19970711  
 PRAI US 1995-392569 19950223  
 US 1995-514977 19950814  
 US 1995-539925 19951006  
 WO 1996-US2203 19960220  
 OS MARPAT 125:118121  
 AB A light-duty liq. microemulsion compn. comprises a mixt. of a paraffin sulfonate and an **ethoxylated** alkyl ether sulfate; a biodegradable compd. of **ethoxylated glyceride** of a palm kernel oil and a trialkyl ether citrate; a cosurfactant; a perfume, essential oil or water insol. hydrocarbon; and water. A compn. contained Na C13-17 paraffin sulfonate 8.7, Na ethoxylated C12-14 alkyl ether sulfate 2.9, D-limonene 6, propylene glycol 5, and Levenol F200.  
 ST microemulsion light duty cleaning compn  
 IT Palm kernel oil  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (**ethoxylated glyceride**; microemulsion light-duty liq. cleaning compns.)

IT **Detergents**  
 (cleaning compns.; microemulsion light-duty liq. cleaning compns.)  
 IT **Fatty acids**, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (coco, esters with polyethylene glycol ether with **glycerol** (3:1), microemulsion light-duty liq. cleaning compns.)  
 IT **Glycerides**, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ethoxylated, of palm kernel oil; microemulsion light-duty liq. cleaning compns.)  
 IT **56-81-5, Glycerol**, uses 111-76-2, Ethylene glycol monobutyl ether 111-77-3, Diethylene glycol monomethyl ether 112-34-5, Diethylene glycol monobutyl ether 143-22-6, Triethylene glycol monobutyl ether 1320-67-8, Propylene glycol monomethyl ether 5989-27-5, D-Limonene 8006-39-1, Terpinol 25322-68-3D, C12-14 alkyl ether sulfate, sodium salt 25322-68-3D, C13-17 paraffin sulfonate, sodium salt 25322-69-4, Polypropylene glycol 29387-86-8, Propylene glycol monobutyl ether 34590-94-8, Dipropylene glycol monomethyl ether 35884-42-5, Dipropylene glycol monobutyl ether 55934-93-5, Tripropylene glycol monobutyl ether 65277-53-4 80763-10-6, Propylene glycol mono(tert-butyl) ether.  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (microemulsion light-duty liq. cleaning compns.)  
 IT **56-81-5, Glycerol**, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (microemulsion light-duty liq. cleaning compns.)  
 RN 56-81-5 HCAPLUS  
 CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)

HO—CH<sub>2</sub>—CH—CH<sub>2</sub>—OH  
 L40 ANSWER 19 OF 42 HCAPLUS COPYRIGHT 2001 ACS  
 AN 1996:194757 HCAPLUS  
 DN 124:235588  
 TI Manufacture of granular detergent components or compositions containing nonionic surfactants  
 IN Chisholm, Adam Lowery; Schamp, Koen Mariette Albert  
 PA Procter and Gamble Co., USA

SO. Eur. Pat. Appl., 13 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM C11D017-06  
 ICS C11D003-20  
 CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 694608	A1	19960131	EP 1994-305619	19940728
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	WO 9603482	A1	19960208	WO 1995-US8725	19950712
	W: CA, CN, JP, MX, US, VN				
	CA 2194053	AA	19960208	CA 1995-2194053	19950712
	CN 1154712	A	19970716	CN 1995-194389	19950712
	JP 10504334	T2	19980428	JP 1995-505775	19950712

PRAI EP 1994-305619 19940728  
WO 1995-US8725 19950712

OS MARPAT 124:235588

AB A granular laundry detergent component or compn. having bulk d. .gtoreq. 650 g/L is prep'd. by dissolving a structuring agent comprising a glyceride (e.g., glycerol tristearate) in a nonionic surfactant (e.g., polyhydroxy fatty acid amide-ethoxylated fatty alc. mixt.) to form a pumpable premix and granulating the premix. The nonionic surfactant does not migrate from the granules during storage. The granules dissolve rapidly in water and give good cleaning of stained fabrics.

ST laundry detergent nonionic surfactant granulation; nonionic surfactant granulation structuring glyceride; glycerol tristearate nonionic surfactant granulation; amide, fatty polyhydroxy surfactant granulation; glucamide, fatty surfactant granulation; ethoxylate alc. surfactant granulation glyceride

IT Fats and Glyceridic oils

RL: MOA (Modifier or additive use); USES (Uses)  
(structuring agents for granulation of nonionic surfactant -contg. detergent components and compns.)

IT Amides, uses

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
(fatty, polyhydroxy, surfactants; glycerides as structuring agents for granulation of detergent compns. contg.)

IT Alcohols, uses

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
(fatty, ethoxylated, surfactants; glycerides as structuring agents for granulation of detergent compns. contg.)

IT Detergents

(laundry, granular, glycerides as structuring agents for granulation of nonionic surfactant-contg.)

IT 555-43-1, Glycerol tristearate

RL: MOA (Modifier or additive use); USES (Uses)  
(structuring agent for granulation of nonionic surfactant -contg. detergent components and compns.)

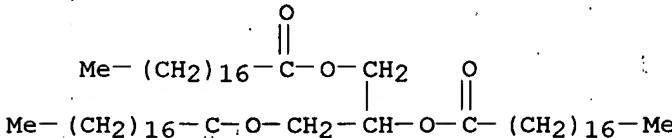
IT 6284-40-8D, N-Methylglucamine, amides with fatty acids

25322-68-3D, Polyethylene glycol, monoalkyl derivs.  
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
(surfactants; glycerides as structuring agents for granulation of detergent compns. contg.)

IT 555-43-1, Glycerol tristearate

RL: MOA (Modifier or additive use); USES (Uses)  
(structuring agent for granulation of nonionic surfactant -contg. detergent components and compns.)

RN. 555-43-1 HCAPLUS  
CN Octadecanoic acid, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)



L40 ANSWER 20 OF 42 HCAPLUS COPYRIGHT 2001 ACS  
AN 1996:147801 HCAPLUS

DN 124:179522

TI Mild surfactant compositions comprising sulfates of monoglycerides or ethoxylated monoglycerides and amino acid derivatives

IN Fabry, Bernd; Behler, Ansgar  
PA Henkel KGaA, Germany

SO Ger., 7 pp.

CODEN: GWXXAW

DT Patent

LA German HCAPLUS

IC ICM C11D001-37

ICS A61K007-075; A61K007-08; A61K007-09; A61K007-13; A01N037-02;  
A01N041-02; A01N037-44; B01F017-00; D06M013-342; D06M015-15;  
C14C009-00

ICA B01F017-08; B01F017-28; B01F017-30; D06M013-262

CC 46-5 (Surface Active Agents and  
Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4433071	C1	19951221	DE 1994-4433071	19940916
	WO 9608551	A1	19960321	WO 1995-EP3505	19950907
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 781319	A1	19970702	EP 1995-932001	19950907
	EP 781319	B1	20000816		
	R: BE, DE, ES, FR, GB, IT, NL				
	JP 10506417	T2	19980623	JP 1995-509874	19950907
	ES 2150583	T3	20001201	ES 1995-932001	19950907
	US 5981450	A	19991109	US 1997-793999	19970317

PRAI DE 1994-4433071 19940916  
WO 1995-EP3505 19950907

OS MARPAT 124:179522

AB The title compns. contain sulfates R<sub>1</sub>CO(OCH<sub>2</sub>CH<sub>2</sub>)<sub>x</sub>OCH<sub>2</sub>CH[O(CH<sub>2</sub>CH<sub>2</sub>O)<sub>y</sub>H]CH<sub>2</sub>O(CH<sub>2</sub>CH<sub>2</sub>O)<sub>z</sub>SO<sub>3</sub>X (R<sub>1</sub>CO = C<sub>6</sub>-22 acyl; x + y + z = 0-30; X = alkali or alk. earth metal) and amino acid derivs. selected from N-(C<sub>6</sub>-22 acyl)glutamic acids or salts, wheat and/or soya protein hydrolyzates, and/or condensates of C<sub>12</sub>-18 fatty acids and wheat and/or soya proteins. The compns. have good foaming properties and mildness to skin and are useful in skin cleansers, shampoos, detergents for washing fabrics, etc.

ST amino acid deriv glyceride sulfate surfactant; ethoxylate glyceride sulfate surfactant mixt mildness; skin mildness surfactant mixt glyceride sulfate; foaming surfactant mixt glyceride sulfate; glutamate acyl surfactant mixt glyceride sulfate; cleaner skin surfactant glyceride sulfate; shampoo surfactant glyceride sulfate

IT Surfactants

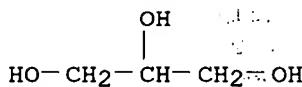
(foaming mixts. of monoglyceride sulfates and amino acid derivs. with mildness to skin)

IT Detergents

Shampoos

(foaming mixts. of monoglyceride sulfates and amino acid

derivs. with mildness to skin as surfactants for)  
 IT Foaming agents  
     (foaming surfactant mixts. contg. monoglyceride  
         sulfates and amino acid derivs. with mildness to skin)  
 IT Protein hydrolyzates  
   RL: PRP (Properties); TEM (Technical or engineered material use); USES  
   (Uses)  
     (in foaming surfactant mixts. contg. monoglyceride  
         sulfates with mildness to skin)  
 IT Proteins, uses  
   RL: PRP (Properties); TEM (Technical or engineered material use); USES  
   (Uses)  
     (reaction products with coco fatty acids; in  
         foaming surfactant mixts. contg. monoglyceride  
         sulfates with mildness to skin)  
 IT 56-81-5D, Glycerol, monoesters with fatty  
     acids, sulfated, sodium salts 7664-93-9D, Sulfuric acid,  
     monoesters with monoglycerides, sodium salts  
   RL: PRP (Properties); TEM (Technical or engineered material use); USES  
   (Uses)  
     (in foaming surfactant mixts. contg. amino acid derivs. with  
         mildness to skin)  
 IT 42926-22-7, Sodium N-lauroylglutamate  
   RL: PRP (Properties); TEM (Technical or engineered material use); USES  
   (Uses)  
     (in foaming surfactant mixts. contg. monoglyceride  
         sulfates with mildness to skin)  
 IT 56-81-5D, Glycerol, monoesters with fatty  
     acids, sulfated, sodium salts  
   RL: PRP (Properties); TEM (Technical or engineered material use); USES  
   (Uses)  
     (in foaming surfactant mixts. contg. amino acid derivs. with  
         mildness to skin)  
 RN 56-81-5 HCPLUS  
 CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L40 ANSWER 21 OF 42 HCPLUS COPYRIGHT 2001 ACS  
 AN 1996:71501 HCPLUS  
 DN 124:179521  
 TI Tumble dryer articles containing surfactant mixtures for fabric  
     conditioning compositions  
 IN Lam, Andrew C.; Lin, Samuel Q.; Taylor, Timothy J.; Winters, John R.  
 PA Lever Brothers Company, Division of Conopco, Inc., USA  
 SO U.S., 7 pp  
   CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM D06M013-46  
   ICS D06M010-08; B05D003-12  
 NCL 252008800  
 CC 46-5 (Surface Active Agents and  
     Detergents)  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5480567	A	19960102	US 1994-259706	19940114
OS MARPAT 124:179521				
AB	An article (e.g., nonwoven fabric) giving good transfer of fabric conditioning compds. to fabrics in a tumble dryer contains a mixt. of surfactant with endotherm peak temp. 75-155.degree. selected			

from R<sub>2</sub>N+Me<sub>2</sub> MeOSO<sub>3</sub><sup>-</sup> (R = tallowoyloxyethyl, tallowoyloxypropyl) and ethylenebisstearamide, &gt;req.1 other surfactant with endotherm peak temp. 35-70.degree. selected from long-chain fatty acids (e.g., C16-18), a glycerol deriv. (e.g., glycerol monostearate), and/or alkoxylated C8-20 alcs., and, optionally, another softening agent such as a quaternary ammonium compd., a tertiary fatty alkylamine, a fatty acid, an ethoxylated fatty alc., or a siloxane oil.

ST tumble dryer article fabric conditioner; softener fabric tumble dryer article; ammonium conditioner fabric tumble dryer; fatty acid conditioner; fabric tumble dryer; glycerol deriv conditioner fabric tumble dryer; alc alkoxylate conditioner fabric tumble dryer

IT Softening agents  
 (in tumble dryer articles contg. surfactant mixts. for improved transfer to fabrics)

IT Fatty acids, uses  
 Quaternary ammonium compounds, uses  
 RL: MOA (Modifier or additive use); MSC (Miscellaneous); TEM (Technical or engineered material use); USES (Uses)  
 (in tumble dryer articles for improved transfer of conditioners to fabrics)

IT 57-10-3, Palmitic acid, uses 57-11-4, Stearic acid, uses 57-11-4D, Stearic acid, esters with Me glucoside 110-30-5, Ethylenebisstearamide 112-80-1D, Oleic acid, esters with Me glucoside 1338-41-6, Sorbitan monostearate 1338-43-8, Sorbitan monooleate 3149-68-6D, Methyl glucoside, esters with fatty acids 9004-99-3, Polyethylene glycol monostearate 31566-31-1, Glycerol propyl monostearate  
 RL: MOA (Modifier or additive use); MSC (Miscellaneous); TEM (Technical or engineered material use); USES (Uses)  
 (in tumble dryer articles for improved transfer of conditioners to fabrics)

IT 31566-31-1, Glycerol monostearate  
 RL: MOA (Modifier or additive use); MSC (Miscellaneous); TEM (Technical or engineered material use); USES (Uses)  
 (in tumble dryer articles for improved transfer of conditioners to fabrics)

RN 31566-31-1 HCPLUS  
 CN Octadecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)

CM	1	Octadecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)
CRN	57-11-4	Octadecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)
CMF	C18 H36 O2	Octadecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>16</sub>—Me  
 CM 56-81-5  
 CRN 56-81-5  
 CMF C3.H8 O3

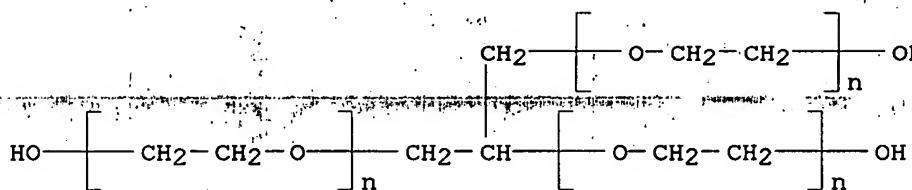
HO—CH<sub>2</sub>—CH—CH<sub>2</sub>—OH  
 HO—CH<sub>2</sub>—CH—CH<sub>2</sub>—OH

L40 ANSWER 22 OF 42 HCPLUS COPYRIGHT 2001 ACS  
 AN 1996:50646 HCPLUS  
 DN 124:264094  
 TI High-foaming, light-duty liquid detergents for cleaning hard surfaces  
 IN Adamy, Steven; Bedi, Sat; Mehreteab, Ammanuel

PA. Colgate Palmolive Co., USA  
SO U.S., 8 pp.  
CODEN: USXXAM  
DT Patent  
LA English  
IC ICM C11D001-90  
ICS C11D001-94; C11D001-24; C11D007-26  
NCL 252544000  
CC 46-6 (Surface Active Agents and Detergents)  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5476614	A	19951219	US 1995-373811	19950117
	US 5767050	A	19980616	US 1995-540636	19951011
	WO 9622347	A1	19960725	WO 1996-US157	19960116
	W:	AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR			
	RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	AU 9646947	A1	19960807	AU 1996-46947	19960116
PRAI	US 1995-373811		19950117		
PA	US 1995-540636		19951011		
	WO 1996-US157		19960116		
OS	MARPAT 124:264094				
AB	Title detergents with good mildness to human skin and improved interfacial tension for cleaning hard surfaces contain a biodegradable solubilizing agent (e.g. an alkyl polysaccharide surfactant), a water-sol., foaming, ethoxylated alkyl ether sulfate anionic surfactant, and a water-sol., foaming zwitterionic betaine surfactant. A typical aq. detergent contained polyethoxylated coco fatty acid glycerol ester (av. d.p. 6) solubilizer 20, Na laureth sulfate 4.5, cocoamide Pr betaine 5, hydrophobic ethoxylated nonionic surfactant 3, and MgSO <sub>4</sub> .7H <sub>2</sub> O 8%				
ST	liq detergent mild hard surface; anionic nonionic zwitterionic surfactant liq detergent; biodegradable solubilizing agent liq detergent; hydrophobic ethoxylated nonionic surfactant liq detergent; laureth sulfate sodium liq detergent; cocoamide propyl betaine liq detergent; polyoxyethylene glyceride ether liq detergent				
IT	Betaines				
	RL: TEM (Technical or engineered material use); USES (Uses) (cocoamide Pr and lauryl dimethylamine; high-foaming, light-duty liq. detergents with good mildness for cleaning hard surfaces)				
IT	Biodegradable materials				
	(high-foaming, light-duty liq. detergents with good mildness for cleaning hard surfaces)				
IT	Polysaccharides, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (alkyl ethers, high-foaming, light-duty liq. detergents with good mildness for cleaning hard surfaces)				
IT	Fatty acids, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (coco, esters with polyethylene glycol ether with glycerol (3:1), high-foaming, light-duty liq. detergents with good mildness for cleaning hard surfaces)				
IT	Detergents				
	(liq., high-foaming, light-duty liq. detergents with good mildness for cleaning hard surfaces)				
IT	112-42-5, 1-Undecanol 9004-82-4, Sodium laureth sulfate 31694-55-0D, Polyethylene glycol glycerol ether, esters with coco fatty acids 34398-01-1, Neodol 1-9 144113-31-5, APG 600 156014-44-7, APG 625				
	RL: TEM (Technical or engineered material use); USES (Uses) (high-foaming, light-duty liq. detergents with good mildness				

for cleaning hard surfaces)  
IT 31694-55-0D; Polyethylene glycol glycerol ether, esters  
with coco fatty acids  
RL: TEM (Technical or engineered material use); USES (Uses)  
(high-foaming, light-duty liq. detergents with good mildness  
for cleaning hard surfaces)  
RN 31694-55-0 HCAPLUS  
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''1,2,3-  
propanetriyltris(.omega.-hydroxy- (9CI) (CA INDEX NAME)



L40 ANSWER 23 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1995:931304 HCAPLUS

DN 123:344229

TI Microemulsion all-purpose liquid cleaning compositions for hard surfaces  
IN Thomas, Barbara; Adamy, Steven; Bala, Frank; Mehreteab, Ammanuel; Mondin,  
PA Myriam; Loth, Myriam; Broze, Guy  
Colgate-Palmolive Co., USA  
SO Eur. Pat. Appl., 14 pp.  
CODEN: EPXXDW  
DT Patent  
LA English  
IC ICM C11D017-00  
ICS C11D001-825; C11D001-83; C11D001-66  
CC 46-6 (Surface Active Agents and  
Detergents)

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 668346	A1	19950823	EP 1995-300717	19950206
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
	US 5571459	A	19961105	US 1994-350576	19941207
PRAI	US 1994-192902		19940207		
	US 1994-350576		19941207		

AB Environment-friendly aq. title compns. contain ethoxylated  
glycerol-type compd. (polyethoxylated glycerol coco  
fatty acid ester) 1-20, anionic sulfate surfactant 0.1-8, a cosurfactant  
1-50, and .gtoreq.1 hydrocarbon and(or) perfume 0.4-20%. The  
ethoxylated glycerol-type compd., hydrocarbon, and  
perfume improved the removal of greasy or oily soil from the surfaces.  
ST environment friendly emulsion liq. cleaner; perfume emulsion liq. cleaner;  
hydrocarbon emulsion liq. cleaner; ethoxylated glycerol  
emulsion liq. cleaner

IT Hydrocarbons, uses

Terpenes and Terpenoids, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(microemulsion all-purpose liq. cleaning compns. for hard surfaces)

IT Fatty acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(coco, esters, with polyethylene glycol glycerol ether;  
microemulsion all-purpose liq. cleaning compns. for hard surfaces)

IT Fatty acids, uses

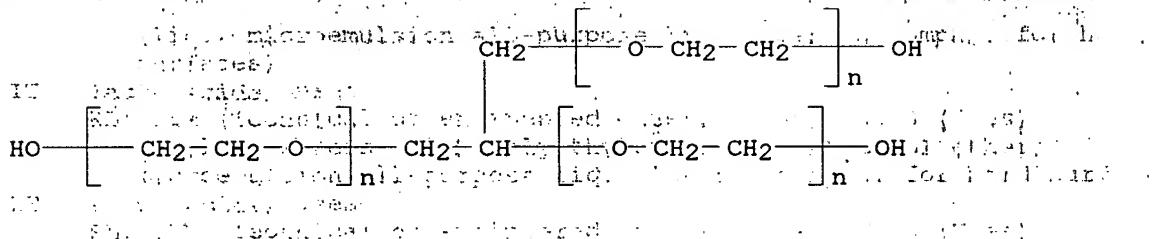
RL: TEM (Technical or engineered material use); USES (Uses)  
(coco, esters with polyethylene glycol ether with glycerol  
(3:1), Levenol F 200; microemulsion all-purpose liq. cleaning compns.  
for hard surfaces)

IT Detergents

- (liq., microemulsion all-purpose liq. cleaning compns. for hard surfaces)
- IT Fatty acids, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(tallow, esters, with polyethylene glycol glycerol ether;  
microemulsion all-purpose liq. cleaning compns. for hard surfaces)
- IT Fatty acids, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(tallow, esters with polyethylene glycol ether with glycerol  
(3:1), Levenol V 501/2; microemulsion all-purpose liq. cleaning compns.  
for hard surfaces)
- IT 112-40-3, Dodecane 31694-55-0D, Polyethylene glycol  
glycerol ether, fatty esters  
RL: TEM (Technical or engineered material use); USES (Uses)  
(microemulsion all-purpose liq. cleaning compns. for hard surfaces)
- IT 31694-55-0D, Polyethylene glycol glycerol ether, fatty  
esters  
RL: TEM (Technical or engineered material use); USES (Uses)  
(microemulsion all-purpose liq. cleaning compns. for hard surfaces)

RN 31694-55-0 HCPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''-1,2,3-  
propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)



L40 ANSWER 24 OF 42 HCPLUS COPYRIGHT 2001 ACS

AN 1995:902631 HCPLUS

DN 123:290532

TI Monoglycerides for improving the foaming properties of fatty acid esters of ethoxylated alcohols

IN Tonomura, Manabu; Iwahashi, Masaaki; Koike, Toyomi

PA Kao Corp., Japan

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM A61K007-50

ICS: A61K007-48; C11D001-825; C11D001-94

CC 46-6 (Surface Active Agents and  
Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 661043	A1	19950705	EP 1994-120398	19941222
	R: DE, ES, GB				
	JP 07197083	A2	19950801	JP 1993-354071	19931228
	US 5554315	A	19960910	US 1994-364687	19941228

PRAI JP 1993-354071 19931228

AB The foaming properties of a surfactant R(OR<sub>1</sub>)<sub>n</sub>R<sub>2</sub> (R = C<sub>10</sub>-18 alkanoyl or alkenoyl; R<sub>1</sub> = C<sub>2</sub>-4 alkylene; R<sub>2</sub> = lower alkyl; n = 5-100) are improved by the addn. of a monoglyceride R<sub>3</sub>OCH<sub>2</sub>CH(OH)CH<sub>2</sub>OH (R<sub>3</sub> = C<sub>8</sub>-16 alkanoyl or C<sub>12</sub>-22 alkenoyl). A 2:1 mixt. of Me(CH<sub>2</sub>)<sub>10</sub>CO(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>OMe (n = 15) and glycerol monocaprate showed good foaming properties.

ST fatty ester ethoxylate alc foaming monoglyceride;

polyoxyethylene alkyl ether fatty ester foaming; glyceride foaming fatty ester ethoxylate alc; laurate polyoxyethylene alkyl ether foaming monoglyceride; caprate glycerol foaming fatty ester ethoxylate; nonionic surfactant fatty ester

IT ethoxylate foaming  
 Foaming agents  
     (monoglycerides; mixts. with fatty acid  
         esters of ethoxylated lower alcs. for improved foaming)

IT Detergents  
     (cleaning compns., mixts. of monoglycerides and fatty  
         acid esters of ethoxylated lower alcs. as  
         surfactants for high-foaming)

IT Glycerides, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)  
     (mono-, surfactants; mixts. with fatty acid  
         esters of ethoxylated lower alcs. for improved foaming)

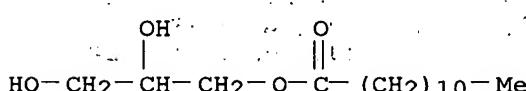
IT Surfactants  
     (nonionic, mixts. of monoglycerides and fatty  
         acid esters of ethoxylated lower alcs. as  
         high-foaming)

IT 142-18-7, Dodecanoic acid 2,3-Dihydroxypropyl ester  
 542-44-9, Hexadecanoic acid 2,3-Dihydroxypropyl ester  
 2277-23-8, Decanoic acid 2,3-Dihydroxypropyl ester  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)  
     (surfactants; mixts. with fatty acid  
         esters of ethoxylated lower alcs. for improved foaming)

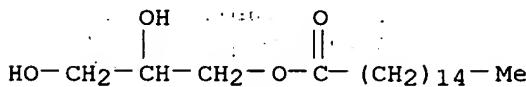
IT 9004-74-4D, Polyethylene glycol monomethyl ether, esters with  
     fatty acids 9006-27-3, Polyethylene glycol monomethyl  
     ether laurate 32761-35-6, Polyethylene glycol monomethyl ether myristate  
     53467-81-5, Polyethylene glycol monomethyl ether palmitate 53467-82-6,  
     Polyethylene glycol monomethyl ether stearate  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)  
     (surfactants; mixts. with monoglycerides for  
         improved foaming properties)

IT 142-18-7, Dodecanoic acid 2,3-Dihydroxypropyl ester  
 542-44-9, Hexadecanoic acid 2,3-Dihydroxypropyl ester  
 2277-23-8, Decanoic acid 2,3-Dihydroxypropyl ester  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)  
     (surfactants; mixts. with fatty acid  
         esters of ethoxylated lower alcs. for improved foaming)

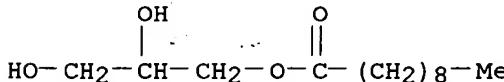
RN 142-18-7 HCPLUS  
 CN Dodecanoic acid, 2,3-dihydroxypropyl ester (9CI) (CA INDEX NAME)



RN 542-44-9 HCPLUS  
 CN Hexadecanoic acid, 2,3-dihydroxypropyl ester (9CI) (CA INDEX NAME)



RN 2277-23-8 HCPLUS  
 CN Decanoic acid, 2,3-dihydroxypropyl ester (9CI) (CA INDEX NAME)



L40 ANSWER 25 OF 42 HCAPLUS COPYRIGHT 2001 ACS  
AN 1995:713730 HCAPLUS  
DN 123:86640  
TI Preparation of surfactant mixtures containing ethoxylated partial glycerides  
IN Bigorra Llosas, Joaquim; Pi, Rafael; Prat Queralt, Ester  
PA Henkel K.-G.a.A., Germany; Pulcra S.A.  
SO Ger., 6 pp.  
CODEN: GWXXAW  
DT Patent  
LA German  
IC ICM C07C233-36  
ICS C07C233-38; C07C069-708; C07C231-12; C07D233-22; C11D001-90;  
C11D001-94; C11D001-62

ICA A01N033-12

CC 46-3 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4337324	C1	19950216	DE 1993-4337324	19931102
	DE 4337324	C2	19980520		
	WO 9512571	A1	19950511	WO 1994-EP3520	19941026

W: JP, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

EP-726890 Al 42 19960821 EP 1994-930979 19941026

EP-726890 B1 19990512

R: BE, DE, ES, FR, GB, IT

JP 09504332 T2 19970428 JP 1994-512996 19941026

ES 2133586 T3 19990916 ES 1994-930979 19941026

PRAI DE 1993-4337324 19931102

WO 1994-EP3520 19941026

OS MARPAT 123:86640

AB The title mixts., showing good storage stability and useful in detergents and shampoos, are prep'd. by alkylating a secondary or tertiary amine in the presence of an ethoxylated partial glyceride in the absence of water or an org. solvent. An adduct of 7 mol ethylene oxide and 1 mol coco monoglyceride was heated to 85.degree., mixed with ClCH<sub>2</sub>CO<sub>2</sub>Na, treated with N-coco amidopropyl-N,N-dimethylamine, and heated at 90.degree. to give a surfactant mixt. contg. betaine 55, ethoxylated coco monoglyceride 38, coco fatty acid 5, and salt 2%.

ST betaine ethoxylate partial glyceride surfactant mixt; amine quaternization surfactant ethoxylate partial glyceride

IT Quaternization

(of amines in prepn. of surfactant mixts. contg. betaines and ethoxylated partial glycerides)

IT Surfactants

(prepn. of solvent-free mixts. of betaines and ethoxylated partial glycerides)

IT Betaines

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(coco amidopropyl, prepn. of surfactant mixts. contg. ethoxylated partial glycerides and).

IT Amides, uses

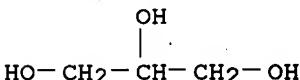
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(coco, N-[(dimethylamino)propyl], quaternization products with sodium chloroacetate; prepn. of surfactant mixts. contg. ethoxylated partial glycerides and)

IT 56-81-5DP, Glycerol, partial esters with fatty acids, ethoxylated 25322-68-3DP, Polyethylene glycol, ethers with partial glycerides

RL: IMF (Industrial manufacture); TEM (Technical or engineered material

use); PREP (Preparation); USES (Uses)  
 (prepn. of surfactant mixts. contg. coco amidopropyl betaine  
 and)  
 IT 3926-62-3DP, Sodium chloroacetate, quaternization products with (coco  
 amidopropyl)dimethylamine  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (prepn. of surfactant mixts. contg. ethoxylated  
 partial glycerides and)  
 IT 56-81-5DP, Glycerol, partial esters with fatty  
 acids, ethoxylated  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (prepn. of surfactant mixts. contg. coco amidopropyl betaine  
 and)  
 RN 56-81-5 HCAPLUS  
 CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L40 ANSWER-26 OF 42. HCAPLUS. COPYRIGHT 2001 ACS  
 AN 1995:594416 HCAPLUS  
 DN 123:86666  
 TI Detergent compositions containing alkoxylated glycerol  
 and mono-, di-, and triesters of alkoxylated glycerol  
 IN Pujol, Enrique; Pujadas, Francisco; Prat, Antonio; Okabe, Kazuhiko  
 PA Kao Corporation, S.A., Spain  
 SO U.S., 7 pp. Cont.-in-part of U.S. Ser. No. 979,092, abandoned.  
 CODEN: USXXAM

DT Patent  
 LA English  
 IC ICM C11D001-825  
 ICS C11D001-722; C11D011-04

NCL 252174220  
 CC 46-5 (Surface Active Agents and  
 Detergents).

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5403509	A	19950404	US 1993-93621	19930720
PRAI	EP 1992-500092		19920720		
	US 1992-979052		19921119		

AB Detergent compns. contg. glycerol derivs. B(OCHR1CH2)nOCH[CH2O(CH2CHR1O)mB]  
 ]CH2O(CH2CHR1O)pB (I; B = H, RCO; R = C6-22 alkyl or  
 alkenyl; R1 = H, CH3; n, m, p = 0-40; n + m + p = 2-100) and I (B = H; R1,  
 n, m, p as defined above) are non-toxic, non-irritating, and biodegradable  
 and show good detergency, foam stability, and dye transfer inhibition  
 during laundering. The glycerol derivs. are prep'd. by  
 interesterification of triglycerides (e.g., coconut oil) with  
 glycerol, alkoxylation with a C2-3 alkylene oxide, and  
 esterification with a fatty acid.

ST glycerol alkoxylate ester laundry detergent;  
 ethoxylate glycerol ester laundry detergent; fatty ester  
 glycerol alkoxylate detergent; coco glyceride  
 alkoxylate ester detergent; dye transfer inhibitor laundry  
 detergent

IT Dyes  
 (alkoxylated glycerol and esters of  
 alkoxylated glycerol in laundry detergents  
 for inhibiting transfer of)

IT Coconut oil  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material

*H.W.S. 7/5*

use); USES (Uses)  
 (interesterification products with glycerol,  
 ethoxylated, surfactants; in laundry  
 detergents with dye-transfer-inhibiting ability)

IT Fatty acids, uses  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (mono- and diesters with glycerol and ethoxylated  
 glycerol, surfactants; in laundry detergents  
 with dye-transfer-inhibiting ability)

IT Glycerides, uses  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (di-, ethoxylated, surfactants; in laundry  
 detergents with dye-transfer-inhibiting ability)

IT Detergents  
 (laundry, alkoxylated glycerol and esters of  
 alkoxylated glycerol in dye-transfer-inhibiting)

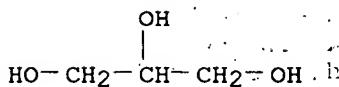
IT Glycerides, uses  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (mono-, ethoxylated, surfactants; in laundry  
 detergents with dye-transfer-inhibiting ability).

IT Surfactants  
 (nonionic, alkoxylated glycerol and esters of  
 alkoxylated glycerol; prepn. and use for dye transfer  
 inhibition during laundering)

IT 56-81-5D, Glycerol, interesterification products with  
 coconut oil, ethoxylated 75-21-8D, Ethylene oxide, reaction  
 products with glycerol and glycerol fatty  
 acid esters  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (surfactants; in laundry detergents with  
 dye-transfer-inhibiting ability)

IT 56-81-5D, Glycerol, interesterification products with  
 coconut oil, ethoxylated  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (surfactants; in laundry detergents with  
 dye-transfer-inhibiting ability)

RN 56-81-5 HCPLUS  
 CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L40 ANSWER 27 OF 42 HCPLUS COPYRIGHT 2001 ACS  
 AN 1995:502969 HCPLUS  
 DN 122:242808  
 TI Laundry detergent containing protease for removing protein soils  
 IN Daurov, Boris K.; Simanova, Marionella V.; Chernyshev, Gennadij N.;  
 Mikhalkin, Anatolij P.; Gnatyuk, Petro P.; Fanda, Valentina V.  
 PA Vsesoyuznyj Nauchno-Issledovatelskij i Proektnejj Institut Khimicheskoy  
 Promyshleenosti, USSR  
 SO U.S.S.R.  
 From: Izobreteniya 1993, 19, 182.  
 CODEN: URXXAF  
 DT Patent  
 LA Russian  
 IC ICM C11D003-386  
 ICI C11D003-386, C11D001-72, C11D003-20, C11D009-26  
 CC 46-5 (Surface Active Agents and

**Detergents)**  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	SU 1817790	A3	19930523	SU 1991-4951905	19910628
AB	The title detergent with good enzyme stability contains ethoxylated nonylphenol or Na alkanesulfonate 13-18, ethoxylated C10-18 synthetic fatty alcs. 7-15, K salts of C17-22 synthetic fatty acids 2-5, ethylene glycol or glycerol 5-10, K adipate 2-5, protease 1-3, N-(C9-20 acyl) amino acid 1-3, MgSO <sub>4</sub> 0.5-1.5, brightener 0.1-0.3, and fragrance 0.1-0.3%, the balance being water.				
ST	laundry detergent protease storage stability; ethoxylate nonylphenol laundry detergent protease; alkanesulfonate laundry detergent protease; potassium soap laundry detergent protease; ethylene glycol laundry detergent protease; glycerol laundry detergent protease				

IT **Detergents**  
(laundry, liq., storage-stable protease-contg.)

IT **Soaps**  
RL: TEM (Technical or engineered material use); USES (Uses)  
(potassium, in liq. laundry detergents contg. protease)

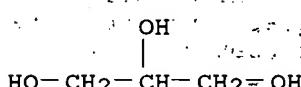
IT **56-81-5, Glycerol**, uses 107-21-1, Ethylene glycol,  
uses 7440-09-7D, Potassium, salts with fatty acids  
9016-45-9, Ethoxylated nonylphenol 19147-16-1, Dipotassium adipate  
25322-68-3D, Polyethylene glycol, monoalkyl ethers  
RL: TEM (Technical or engineered material use); USES (Uses)  
(in liq. laundry detergents contg. protease)

IT 9001-92-7, Proteinase  
RL: TEM (Technical or engineered material use); USES (Uses),  
(in liq. laundry detergents with storage stability)

IT **56-81-5, Glycerol**, uses 107-21-1  
RL: TEM (Technical or engineered material use); USES (Uses)  
(in liq. laundry detergents contg. protease)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L40 ANSWER 28 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1994:438117 HCAPLUS

DN 121:38117

TI Pearlescent liquid detergent compositions

IN Hayakawa, Yutaka; Tosaka, Masaki

PA Kao Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C11D001-83

ICS A61K007-075; A61K007-50

ICI C11D001-83, C11D001-68, C11D001-12, C11D003-40, C11D003-37

CC 46-6 (Surface Active Agents and

Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06017088	A2	19940125	JP 1992-174499	19920701

OS MARPAT 121:38117

AB The title compns., showing good storage stability, foaming properties, and detergency, contain 1-40% glycosides R1(OR2)xGy (R1 = C8-18 alkyl, alkenyl, alkylphenyl; R2 = C2-4 alkylene; G = residue of C5-6 reducing sugar; x = 0-5; yr = 1.0-1.42), 1-40% anionic surfactants, 1-10% opacifier [e.g., 2-hydroxyethyl stearate (I), N-(2-hydroxyethyl)stearamide, or a

monoglyceride], and 1-10% polyethylene glycol (II),  
 ethoxylated glycerol, or a similar compd. A compn.  
 contg. dodecyl glucoside 15, polyethylene glycol monododecyl ether sulfate,  
 Na salt 15, I 6, II (mol. wt. 1000) 4, EtOH 5, and H<sub>2</sub>O 55% showed good  
 pearlescence before and after storage at -5.degree., +30.degree., or  
 +40.degree. for 1 mo.

ST pearlescence liq detergent storage stability; glycoside liq detergent  
 pearlescence; polyoxyalkylene ether liq detergent pearlescence; opacifier  
 pearlescence liq detergent; amide opacifier pearlescence detergent;  
 monoglyceride opacifier pearlescence detergent

IT Opacifiers  
 (liq. detergent compns. contg., pearlescent, foaming)

IT Pearly substances  
 (liq. detergents contg. opacifiers and, stable, foaming)

IT Glycosides  
 RL: USES (Uses)  
 (alkyl, liq. detergent compns. contg. opacifiers and,  
 pearlescent, foaming)

IT Detergents  
 (liq., pearlescent, contg. alkyl glycosides and opacifiers, stable,  
 foaming)

IT Glycerides, uses  
 RL: USES (Uses)  
 (mono-, opacifiers, liq. detergent compns. contg.,  
 pearlescent, foaming)

IT Fatty acids, uses  
 RL: USES (Uses)  
 (sulfo, esters, liq. detergent compns. contg. opacifiers and,  
 pearlescent, foaming)

IT 9004-82-4, Polyethylene glycol monododecyl ether sulfate sodium salt  
 59122-55-3  
 RL: USES (Uses)  
 (liq. detergent compns. contg. opacifiers and, pearlescent,  
 foaming)

IT 111-57-9, N-(2-Hydroxyethyl)stearamide 111-60-4, Ethylene glycol  
 monostearate 9051-48-3, Polypropylene glycol ethylene glycol ether  
 25322-68-3 31566-31-1, Glycerin monostearate 31694-55-0  
 , Polyethylene glycol glycerol ether  
 RL: USES (Uses)  
 (opacifiers, liq. detergent compns. contg., pearlescent,  
 foaming)

IT 31566-31-1, Glycerin monostearate 31694-55-0,  
 Polyethylene glycol glycerol ether  
 RL: USES (Uses)  
 (opacifiers, liq. detergent compns. contg., pearlescent,  
 foaming)

RN 31566-31-1 HCPLUS  
 CN Octadecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX  
 NAME)

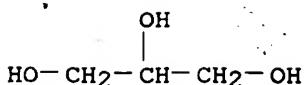
CM 1  
 CRN 57-11-4  
 CMF C18 H36 O2



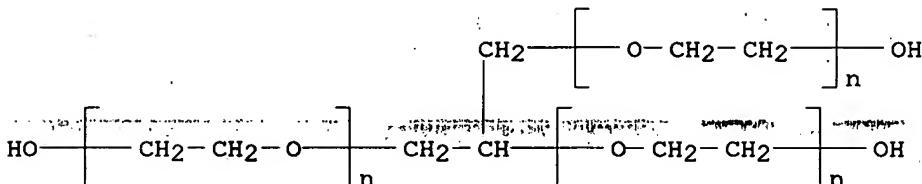
CM 2

CRN 56-81-5

CMF C3 H8 O3



RN 31694-55-0 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''1,2,3-propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)



L40 ANSWER 29 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1994:438102 HCAPLUS

DN 121:38102

TI Nonionic surfactants comprising esters of fatty acids and ethoxylated glycerol and partial glycerides

IN Pujol, Enrique; Pujadas, Francisco; Prat, Antonio; Okabe, Kazuhiko

PA Kao Corp., S.A., Spain

SO Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C11D001-74

CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 586323	A1	19940309	EP 1993-500108	19930720
	EP 586323	B1	19960410		
	R: AT, BE, DE, ES, FR, GB, IT, NL				
	AT 136579	E	19960415	AT 1993-500108	19930720
	ES 2088254	T3	19960801	ES 1993-500108	19930720

PRAI EP 1992-500092 19920720

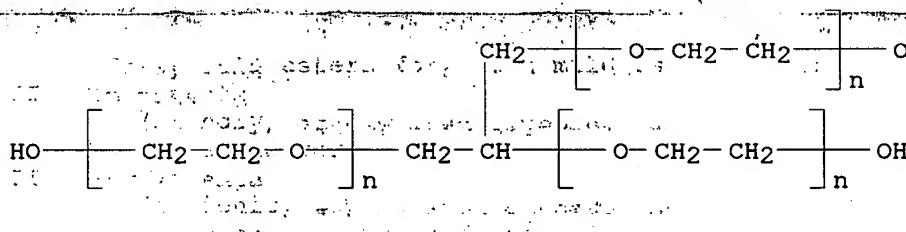
AB The title surfactants B(OCHR1CH2)mOCH2CH[O(CH2CHR1O)nB]CH2O(CH2CHR1O)lB (B = H, RCO; R = C6-22 alkyl or alkenyl; R1 = H, Me; n, m, l = 0-40; m + n + l = 2-100), comprising monoesters 46-90, diesters 9-30, and triesters 1-15 parts, are useful for washing fabrics, skin, etc., showing good detergency, dye transfer inhibition, and mildness to skin. The surfactants are prep'd. by interesterification of a triglyceride and glycerol and alkoxylation of the product or by alkoxylation of glycerol and reaction of the product with fatty acids or their me esters. A surfactant was prep'd. by interesterifying 0.76 mol coco triglycerides with 2.29 mol glycerol followed by ethoxylation with 45.7 mol ethylene oxide.

ST glyceride alkoxylate nonionic surfactant;  
 glycerol alkanoate alkoxylate nonionic surfactant;  
 ethoxylate glycerol alkanoate nonionic surfactant;  
 polyoxyethylene deriv glycerol alkanoate surfactant; laundry detergent  
 glyceride alkoxylate; skin cleaner glyceride  
 alkoxylate; dye transfer inhibitor glyceride  
 alkoxylate

IT Dyes  
 (transfer of, redn. of, laundry detergents contg. nonionic surfactants for)

IT Detergents  
 (cleaning compns., ethoxylated glycerol)

IT fatty acid esters for, with mildness to skin)  
 Detergents  
 (laundry, ethoxylated glycerol fatty  
 acid esters for)  
 IT Surfactants  
 (nonionic, ethoxylated glycerol fatty  
 acid esters, prepn. and uses of)  
 IT 75-21-8DP, Oxirane, reaction products with glycerol and  
 glycerides 25322-68-3DP, ethers with glycerol esters,  
 esters with fatty acids 31694-55-0DP,  
 fatty acid esters  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (surfactants, prepn. and uses of)  
 IT 31694-55-0DP, fatty acid esters  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (surfactants, prepn. and uses of)  
 RN 31694-55-0 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'',.alpha.''-1,2,3-  
 propanetriyltris(.omega.-hydroxy- (9CI) (CA INDEX NAME)



L40 ANSWER 30 OF 42 HCAPLUS COPYRIGHT 2001 ACS  
 AN 1994:33400 HCAPLUS  
 DN 120:33400  
 TI Esters of fatty acids and ethoxylated polyols as thickeners  
 IN Trius Oliva, Antonio; Ponsati, Obiols, Oriol; Bigorra Llosas, Joaquim;  
 Prat Queralt, Esther  
 PA Henkel K.-G.a.A., Germany; Pulcra S. A.  
 SO Ger. Offen., 6 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 IC ICM C07C069-30  
 ICS C11D003-20  
 ICA B01F017-02; B01F017-10; B01F017-14; B01F017-30; B01F017-42; B01F017-28;  
 B01F017-32  
 CC 46-4 (Surface Active Agents and  
 Detergents)

FAN.CNT	1	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4137317	A1	19930519		DE 1991-4137317	19911113
	WO 9310072	A1	19930527		WO 1992-EP2525	19921104
	W: BR, JP, US					
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE					
EP	613457	A1	19940907		EP 1992-922862	19921104
EP	613457	B1	19960619			
	R: DE, ES, FR, GB, IT					
JP	07501354	T2	19950209		JP 1992-508927	19921104
ES	2088161	T3	19960801		ES 1992-922862	19921104
US	5576451	A	19961119		US 1994-244066	19940513
PRAI	DE 1991-4137317		19911113			
	WO 1992-EP2525		19921104			
OS	MARPAT	120:33400				
AB	The title esters are prep'd. and used as thickeners for aq. surfactant					

solns. An adduct of 110 mol ethylene oxide and 1 mol glycerol was prep'd. with KOH as the ethoxylation catalyst and esterified (0.15 mol) with 0.47 mol tallow fatty acids with MeSO<sub>3</sub>H as the catalyst. The product was used as a thickener for an aq. Na lauryl ether sulfate soln.

ST ethoxylate polyol ester thickener surfactant; glycerol  
ethoxylate ester thickener surfactant; sulfate ethoxylate alc soln  
thickener; polyoxyethylene polyol ether ester thickener

IT Thickening agents  
(fatty acid esters of ethoxylated polyols, for aq.  
surfactants solns.)

IT Surfactants  
Surfactants  
(thickening agents for aq. solns. of, fatty acid esters of ethoxylated polyols as)

IT 9004-82-4  
RL: USES (Uses)

(thickening agents for aq. solns. of, **fatty acid**  
esters of ethoxylated polyols as)

IT 31694-55-0D, Polyethylene glycol glycerol ether, esters with tallow acids 41080-66-4, Polyethylene glycol glycerol ether tristearate 104032-68-0

RL: USES (Uses)  
(thickening agents, for surfactant solns.)  
IT 31694-55-0D, Polyethylene glycol glycerol ether, esters

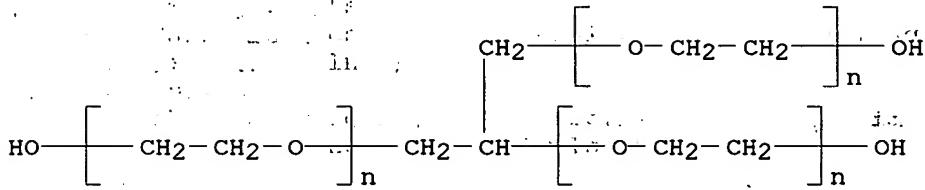
with tallow acids 41080-66-4, Polyethylene glycol

**glycerol ether tristearate 104032-68-0** **RL: USES (Uses)**

RN 31694-55-0 HCABPLUS  
(thickening agents, for surfactant solns.)

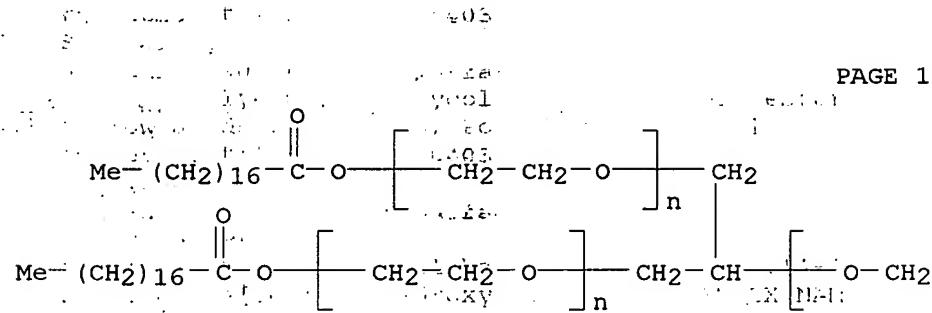
RN 31694-55-0 HCAPLUS  
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.'-1,2,3-propanetriyltris[.omega.-hydroxy- (9CI) (CA INDEX NAME)

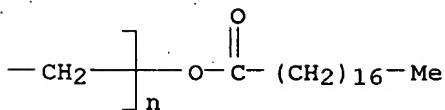
Proposed by the Standing Committee on Environment and Sustainable Development (C-10) (See Exhibit 1)



RN 41080-66-4 HCAPLUS

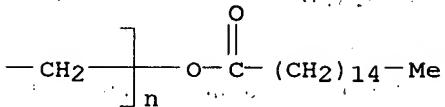
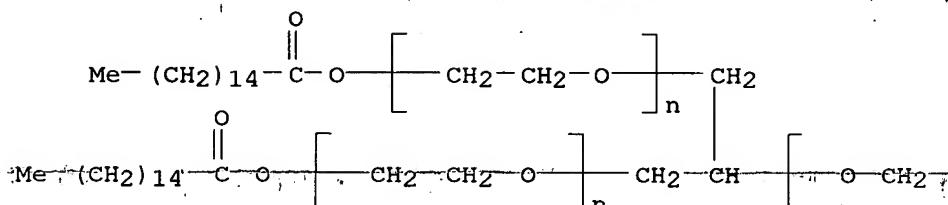
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.'!-1,2,3-propanetriyltris[.omega.-[(1-oxooctadecyl)oxy]- (9CI) (CA INDEX NAME)





RN 104032-68-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',,.alpha.''1,2,3-propanetriyltris[.omega.-[(1-oxohexadecyl)oxy]- (9CI) (CA INDEX NAME)



L40 ANSWER 31 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1993:541659 HCAPLUS

DN 119:141659

TI Nonionic liquid detergent composition for automatic cleaning of rubber printing blankets in offset machines

IN Mueller, Walter R.

PA Baldwin-Gegenheimer GmbH, Germany

SO Eur. Pat. Appl., 5 pp.

CODEN: EPXXDW

DT Patent

LA German

IC ICM C11D017-00

ICS C11D001-74; C11D003-43

CC 46-6 (Surface Active Agents and Detergents)

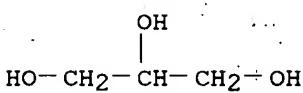
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 527315	A2	19930217	EP 1992-110881	19920626
	EP 527315	A3	19930922		
	EP 527315	B1	19951206		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE DE 4126719	A1	19930218	DE 1991-4126719	19910813
	AT 131207	E	19951215	AT 1992-110881	19920626

PRAI DE 1991-4126719 19910813

AB The title compn., giving good removal of ink and paper residues, is a microemulsion contg. 5-40% adduct of 5-10 mol ethylene oxide and 1 mol

partial glyceride of caprylic and capric acids, 1-10% 1,2-bis(2-oxazolinyl)ethane, and 10-90% Me caprylate, Me caprate, Me laurate, Me myristate, and/or coco fatty acid Me esters.  
 ST offset printing rubber blanket cleaner; **ethoxylate**  
**glyceride** cleaner offset printing; caprate ester cleaner offset printing; caprylate ester cleaner offset printing; laurate methyl cleaner offset printing; myristate methyl cleaner offset printing; nonionic surfactant cleaner offset printing  
 IT **Detergents**  
     (cleaning compns., liq., nonionic, for rubber printing blankets in offset machines)  
 IT **Fatty acids, esters**  
     RL: USES (Uses)  
         (coco, Me esters, cleaners contg., for offset printing blankets)  
 IT **Lithography**  
     (offset, cleaners for rubber printing blankets in)  
 IT **56-81-5D, Glycerol, esters with capric and caprylic acids, ethoxylated** 75-21-8D, Ethylene oxide, reaction products with partial **glycerides** of carboxylic acids 110-42-9, Methyl caprate 111-11-5, Methyl caprylate 111-82-0, Methyl laurate 124-07-2D, Caprylic acid, **glycerides, ethoxylated** 124-10-7, Methyl myristate 334-48-5D, Capric acid, **glycerides, ethoxylated** 25322-68-3D, Polyethylene glycol, ethers with partial **glycerides** of C8-10 fatty acids  
 83348-54-3  
     RL: USES (Uses) (cleaners contg., for offset printing blankets)  
 IT **56-81-5D, Glycerol, esters with capric and caprylic acids, ethoxylated**  
     RL: USES (Uses) (cleaners contg., for offset printing blankets)  
 RN 56-81-5 HCAPLUS  
 CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L40 ANSWER 32 OF 42 HCAPLUS COPYRIGHT 2001 ACS  
 AN 1993:410832 HCAPLUS  
 DN 119:10832  
 TI Detergent for cleaning of gas-turbine engine compressors  
 IN Litvinov, Aleksej A.; Lastovets, Anatolij N.; Skripka, Natalya I.; Zadorin, Mikhail V.; Kobinek, Viktor S.; Sedykh, Aleksandr S.; Novikova, Valentina F.; Lopatenko, Svetlana K.; Gorbachevskaya, Lidiya A.  
 PA Ki i inzhenerov grazhdanskoy aviatii im. 60-letiya sssr, USSR  
 SO U.S.S.R.  
 From: Izobreteniya 1992, (30), 117.  
 CODEN: URXXAF  
 DT Patent  
 LA Russian  
 IC ICM C11D001-72  
 ICI C11D001-72, C11D003-20  
 CC 46-6 (Surface Active Agents and Detergents)  
 FAN.CNT 1  

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 1754774	A1	19920815	SU 1990-4838832	19900612

 PI AB The title detergent having increased efficiency at elevated temps. comprises an aq. soln. contg. 0.2-0.4% **ethoxylated** C10-16 synthetic fatty acid monoethanolamides and 2.0-4.0% **glycerol**.  
 ST cleaner gas turbine engine compressor; fatty amide ethoxylate compressor cleaner; **glycerol** fatty amide **ethoxylate** detergent

IT Amides, compounds  
RL: USES (Uses)  
(C10-16, N-(hydroxyethyl), ethoxylated, detergent  
for cleaning of gas-turbine engine compressors contg. aq.  
glycerol and)

IT Turbines  
(compressors, gas-, detergents for cleaning of)

IT Detergents  
(liq., nonionic, ethoxylated fatty acid  
monoethanolamide-glycerol-water mixts., for gas-turbine  
engine compressors)

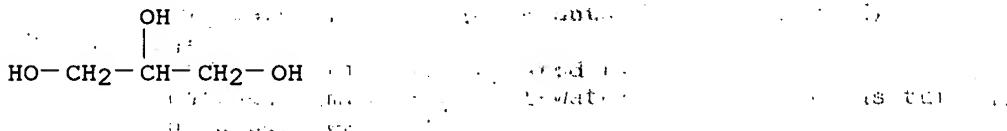
IT Compressors  
(turbine, gas-, detergents for cleaning of)

IT 25322-68-3D, fatty acid ethanolamide derivs.  
RL: USES (Uses)  
(detergent for cleaning of gas-turbine engine compressors  
contg. aq. glycerol and)

IT 56-81-5, Glycerol, uses  
RL: USES (Uses)  
(detergent for cleaning of gas-turbine engine compressors  
contg. ethoxylated fatty acid  
monoethanolamides and)

IT 56-81-5, Glycerol, uses  
RL: USES (Uses)  
(detergent for cleaning of gas-turbine engine compressors  
contg. ethoxylated fatty acid  
monoethanolamides and)

RN 56-81-5 HCAPLUS  
CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L40 ANSWER 33 OF 42 HCAPLUS COPYRIGHT 2001 ACS  
AN 1991:124927 HCAPLUS  
DN 114:124927  
TI Classification and analysis of surfactant products by simple laboratory techniques  
AU Valea Perez, Angel; Gonzalez Arce, Maria L.  
CS Dpto. Ing. Quim. Med. Ambiente, Esc. Univ. Ing. Tec. Ind., Bilbao, 48012,  
Spain  
SO Tec. Lab. (1989), 12(149), 236-45  
CODEN: TCLBAB; ISSN: 0371-5728  
DT Journal  
LA Spanish  
CC 46-3 (Surface Active Agents and  
Detergents)  
Section cross-reference(s): 80  
AB Two anal. methods are described for detection of surfactants in mixts., such as those encountered in com. detergent formulations. Ionic and nonionic surfactants are identified by colorimetric methods using reagents: Ce nitrate, CHCl<sub>3</sub>/AlCl<sub>3</sub>, aq. Br, KMnO<sub>4</sub>, alc. KOH, and acetic anhydride/H<sub>2</sub>SO<sub>4</sub>. Solvent extn. was used to isolate surfactants from formulations and TLC methods were used to sep. ionic and nonionic surfactants in mixt.  
ST colorimetry surfactant detn reagent; chromatog thin layer surfactant mixt; ionic nonionic surfactant sepn TLC  
IT Surfactants  
(detn. of, in surfactant mixts., TLC and colorimetry in)  
IT Chromatography, thin-layer  
(surfactant detn. in mixts. by)  
IT Spectrochemical analysis  
(colorimetric, surfactant detn. in mixts. by)

- IT. **Fatty acids, esters**  
 RL: ANT (Analyte); ANST (Analytical study)  
 (ethoxylated, esters, detn. of, in **surfactant** mixts., TLC and  
 colorimetry in)
- IT. **Amines, compounds**  
 RL: ANT (Analyte); ANST (Analytical study)  
 (fatty, ethoxylated, detn. of, in **surfactant** mixts., TLC and  
 colorimetry in)
- IT. **Saps**  
 RL: ANT (Analyte); ANST (Analytical study)  
 (sodium, detn. of, in **surfactant** mixts., TLC and colorimetry  
 in)
- IT. **Fatty acids, compounds**  
 RL: ANT (Analyte); ANST (Analytical study)  
 (sodium salts, detn. of, in **surfactant** mixts., TLC and  
 colorimetry in)
- IT. 7664-93-9, Sulfuric acid, uses and miscellaneous  
 RL: USES (Uses)  
 (colorimetric reagent contg. acetic anhydride and, for  
**surfactant** detn.)
- IT. 67-66-3, Chloroform, uses and miscellaneous  
 RL: USES (Uses)  
 (colorimetric reagent contg. aluminum chloride and, for  
**surfactant** detn.)
- IT. 108-24-7  
 RL: USES (Uses)  
 (colorimetric reagent contg. aq. sulfuric acid and, for  
**surfactant** detn.)
- IT. 7697-37-2, Nitric acid, uses and miscellaneous  
 RL: USES (Uses)  
 (colorimetric reagent contg. cerium ammonium nitrate and, for  
**surfactant** detn.)
- IT. 7446-70-0, Aluminum chloride (AlCl<sub>3</sub>), uses and miscellaneous  
 RL: USES (Uses)  
 (colorimetric reagent contg. chloroform and, for **surfactant**  
 detn.)
- IT. 15078-94-1, Cerium ammonium nitrate  
 RL: USES (Uses)  
 (colorimetric reagent contg. nitric acid and, for **surfactant**  
 detn.)
- IT. 7722-64-7 7726-95-6, Bromine, uses and miscellaneous  
 RL: USES (Uses)  
 (colorimetric reagent of aq., for **surfactant** detn.)
- IT. 1310-58-3, Potassium hydroxide, uses and miscellaneous  
 RL: USES (Uses)  
 (colorimetric reagent of ethanol and, for **surfactant** detn.)
- IT. 64-17-5, Ethanol, uses and miscellaneous  
 RL: USES (Uses)  
 (colorimetric reagent of potassium hydroxide and, for  
**surfactant** detn.)
- IT. 139-96-8, Triethanolamine lauryl sulfate 151-21-3, Sodium laurylsulfate,  
 analysis 1338-39-2D, Sorbitan monolaurate, ethoxylated 1338-41-6,  
 Sorbitan monostearate 2386-53-0 7664-38-2D, Phosphoric acid, esters,  
 sodium salts 9003-11-6, Ethylene oxide-propylene oxide copolymer  
 9016-45-9, Nonylphenol 12068-03-0, Sodium toluenesulfonate 25155-30-0,  
 Sodium dodecylbenzenesulfonate 25322-68-3 26635-93-8  
 31566-31-1D, Glycerol monostearate, **ethoxylated**  
 32073-22-6, Sodium cumenesulfonate 55348-40-8 60816-61-7 132801-48-0  
 RL: ANT (Analyte); ANST (Analytical study)  
 (detn. of, in **surfactant** mixts., TLC and colorimetry in)
- IT. 31566-31-1D, Glycerol monostearate, **ethoxylated**  
 RL: ANT (Analyte); ANST (Analytical study)  
 (detn. of, in **surfactant** mixts., TLC and colorimetry in)
- RN. 31566-31-1 HCAPLUS  
 CN. Octadecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX  
 NAME)

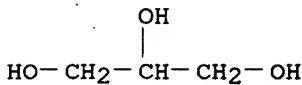
CM 1

CRN 57-11-4  
CMF C18 H36 O2

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>16</sub>—Me

CM 2

CRN 56-81-5  
CMF C3 H8 O3



L40 ANSWER 34 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1991:104848 HCAPLUS

DN 114:104848

TI Dry-cleaning paste

IN Wu, Zhengyong; Zhuang, Weiyi

PA Peop. Rep. China

SO Faming Zhuanli Shengqing Gongkai Shuomingshu, 4 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

IC ICM C11D009-02

ICS C11D009-60; C11D017-00

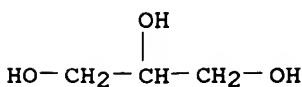
CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1043955	A	19900718	CN 1989-105458	19881231
AB	Dry-cleaning pastes contain monoglycerides 40, distd. tallow fatty acids 20, ETOH 20, polyethylene glycol nonylphenyl ether 6, optical brighteners 4, and alkanolamines 10%.				
ST	dry cleaning paste; monoglyceride dry cleaning paste; fatty acid dry cleaning paste; alkanolamine dry cleaning paste; polyoxyalkylene dry cleaning paste; tallow fatty acid cleaning paste; nonylphenol ethoxylated dry cleaning paste				
IT	Polyoxyalkylenes, uses and miscellaneous				
	RL: USES (Uses)				
	(in dry cleaning pastes)				
IT	Alcohols, uses and miscellaneous				
	RL: USES (Uses)				
	(amino, in dry cleaning pastes)				
IT	Detergents				
	(dry-cleaning, pastes, contg. monoglycerides, tall-oil fatty acids and ethoxylated nonylphenol)				
IT	Glycerides, uses and miscellaneous				
	RL: USES (Uses)				
	(mono-, in dry cleaning pastes)				
IT	Fatty acids, uses and miscellaneous				
	RL: USES (Uses)				
	(tallow, in dry cleaning pastes)				
IT	56-81-5D, 1,2,3-Propanetriol, fatty acid monoesters 64-17-5, Ethanol, uses and miscellaneous			9016-45-9,	
	Polyethylene glycol nonylphenyl ether				
	RL: USES (Uses)				
	(in dry cleaning pastes)				



CRN 56-81-5  
CMF C3 H8 O3



L40 ANSWER 36 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1988:551957 HCAPLUS

DN 109:151957

TI Amides of ethoxylated carboxylic acids of coconut oils as new group of surface active agents

CS Chemische Fabrik Chem-y G.m.b.H., Emmerich, Fed. Rep. Ger.

SO Pollena: Tluszcze, Srodkie Piorace, Kosmet. (1987), 31(9-10), 163-70

CODEN: PTSKDF

DT Journal

LA Polish

CC 46-3 (Surface Active Agents and

Detergents)

Section cross-reference(s): 62

AB Akypo-Soft KA 250 BV, a mixt. of glycerol derivs. and amidated carboxymethylated poly(oxyethylene) Na salts obtained by amidation, ethoxylation, and carboxymethylation of coconut oil; exhibited good foam-forming properties and formed stable foam, and caused little irritation of eyes and skin. Cosmetic compns. (shampoos, washing gel) contg. the above surfactant are given.

ST ethoxylated coco amide surfactant; cosmetics ethoxylated coco amide; shampoo ethoxylated coco amide

IT Shampoos

(ethoxylated and carboxymethylated coconut oil amides for)

IT Surfactants

(anionic, coconut oil amides, ethoxylated and carboxymethylated)

IT Amides, compounds

RL: USES (Uses)

(coco, N-(hydroxyethyl), ethoxylated and carboxymethylated, surfactants, properties and uses of)

IT 56-81-5D, Glycerol, derivs.

RL: USES (Uses)

(mixts. with ethoxylated and carboxymethylated, coconut oil amides, surfactants, properties and uses of)

IT 55067-88-4D, fatty acid amide derivs. 116898-81-8,

Akypo-Soft KA 250BV

RL: TEM (Technical or engineered material use); USES (Uses)

(surfactants, properties and uses of)

IT 56-81-5D, Glycerol, derivs.

RL: USES (Uses)

(mixts. with ethoxylated and carboxymethylated, coconut oil amides, surfactants, properties and uses of)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L40 ANSWER 37 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1985:617283 HCAPLUS

DN 103:217283

TI Separation, identification and determination of nonionic surfactants using high-performance liquid chromatography  
AU Koenig, Hans; Ryschka, Roland; Strobel, Werner  
CS Anal. Lab., Blendax-Werke R. Schneider G.m.b.H. und Co., Mainz, D-6500, Fed. Rep. Ger.  
SO Fresenius' Z. Anal. Chem. (1985), 321(3), 263-7  
CODEN: ZACFAU; ISSN: 0016-1152  
DT Journal  
LA German  
CC 46-3 (Surface Active Agents and Detergents)  
Section cross-reference(s): 80  
AB A method is described which allows the sepn., identification, and detn. of mixts. of nonionic surfactants in a single process. The sepn. of most of the ethoxylated nonionics and of all fatty acid alkanolamides can be performed by HPLC using reversed-phase silica columns, 90:10 (vol.) MeOH-H<sub>2</sub>O as the liq. phase at apprx. 170 bar with flow rate 1.5 mL/min, and a differential refractometer for detection and quant. detn. The detection limits are 2-5 .mu.g/mL, except for the partial esters of ethoxylated fatty acids which are about 10 times lower. Ethylene oxide-propylene oxide adducts can be sepd. on columns of lower polarity with MeOH as the liq. phase.  
ST nonionic surfactant detn liq chromatog; HPLC detn nonionic surfactant  
IT Fatty acids, analysis  
RL: ANST (Analytical study)  
(in nonionic surfactants, sepn. and detn. of, by high-performance liq. chromatog.).  
IT Alcohols, compounds  
RL: USES (Uses)  
(C12-14, ethoxylated, in nonionic surfactants, sepn. and detn. of, by high-performance liq. chromatog.)  
IT Alcohols, compounds  
RL: USES (Uses)  
(C12-18, ethoxylated, nonionic surfactants, sepn. and detn. of mixts. of, by high-performance liq. chromatog.)  
IT Alcohols, compounds  
RL: USES (Uses)  
(C15-18, ethoxylated, nonionic surfactants, sepn. and detn. of mixts. of, by high-performance liq. chromatog.)  
IT Alcohols, compounds  
RL: USES (Uses)  
(C16 and C18-unsatd., ethoxylated, in nonionic surfactants, sepn. and detn. of, by high-performance liq. chromatog.)  
IT Alcohols, compounds  
RL: USES (Uses)  
(C16-18, ethoxylated, nonionic surfactants, sepn. and detn. of mixts. of, by high-performance liq. chromatog.)  
IT Glycerides, compounds  
RL: USES (Uses)  
(C16-18 mono-, ethoxylated, in nonionic surfactants, sepn. and detn. of mixts. of, by high-performance liq. chromatog.)  
IT Amides, compounds  
RL: USES (Uses)  
(fatty, ethoxylated, in nonionic surfactants, sepn. detn. of mixts. of, by high-performance liq. chromatog.)  
IT Surfactants  
(nonionic, sepn. and detn. of mixts. of, by high-performance liq. chromatog.)  
IT 57-10-3, uses and miscellaneous 57-11-4, uses and miscellaneous  
93-82-3 93-83-4 111-57-9 111-87-5, analysis 112-30-1 112-53-8  
112-72-1 112-80-1, analysis 112-92-5 120-40-1 124-07-2, uses and  
miscellaneous 136-26-5 142-54-1 142-58-5 142-78-9 143-07-7, uses  
and miscellaneous 143-28-2 334-48-5 544-31-0 544-63-8, uses and  
miscellaneous 996-97-4 7545-23-5 7545-24-6 9002-92-0 9004-81-3  
9004-89-1 9004-94-8 9004-95-9 9004-96-0 9004-98-2 9004-99-3  
9005-00-9 9005-64-5 9005-67-8 9016-45-9 9036-19-5 10525-14-1  
11111-34-5 12441-09-7D, monoesters with fatty acids.

18738-25-5 25154-52-3 25168-73-4 25322-68-3 26183-52-8  
 26635-92-7 27193-28-8 27215-38-9 27252-75-1 27306-79-2  
**31566-31-1** 31587-78-7 31587-80-1 31587-81-2 31799-71-0  
 35627-96-4 36653-82-4 37200-48-9 42131-42-0 **51158-08-8**  
**51192-09-7** **55973-44-9** 56863-02-6 61596-57-4  
 95471-18-4 99264-60-5 150372-93-3

RL: USES (Uses)

(in nonionic surfactants, sepn. and detn. of, by  
high-performance liq. chromatog.)

IT 27215-38-9 31566-31-1 51158-08-8  
51192-09-7 55973-44-9 99264-60-5

**150372-93-3**

RL: USES (Uses)

(in nonionic surfactants, sepn. and detn. of, by  
high-performance liq. chromatog.)

RN 27215-38-9 HCPLUS

CN Dodecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX NAME)

CM 1

CRN 143-07-7

CMF C12 H24 O2

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>10</sub>—Me

31566-31-1 56-81-5 27215-38-9

27252-75-1 31587-78-7 31587-80-1

31587-81-2 31799-71-0 42131-42-0

51158-08-8 51192-09-7 55973-44-9

CRN 56-81-5

CMF C3 H8 O3

HO—CH<sub>2</sub>—CH—CH<sub>2</sub>—OH

31566-31-1 HCPLUS

CN Octadecanoic acid, monoester with 1,2,3-propanetriol (9CI) (CA INDEX

NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>16</sub>—Me

CM 2

CRN 56-81-5

CMF C3 H8 O3

OH

HO—CH<sub>2</sub>—CH—CH<sub>2</sub>—OH

RN 51158-08-8 HCPLUS

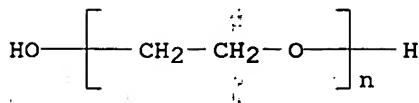
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with  
1,2,3-propanetriol monoocetadecanoate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3

CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> H<sub>2</sub> O

CCI PMS



CM 2

CRN 57-11-4

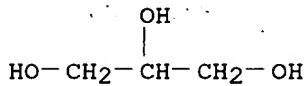
CMF C<sub>18</sub> H<sub>36</sub> O<sub>2</sub>



CM 3

CRN 56-81-5

CMF C<sub>3</sub> H<sub>8</sub> O<sub>3</sub>



RN 51192-09-7 HCAPLUS

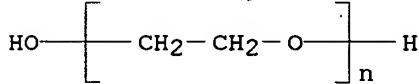
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with  
1,2,3-propanetriol mono-(9Z)-9-octadecenoate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3

CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> H<sub>2</sub> O

CCI PMS



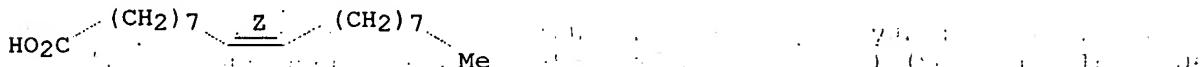
CM 2

CRN 112-80-1

CMF C<sub>18</sub> H<sub>34</sub> O<sub>2</sub>

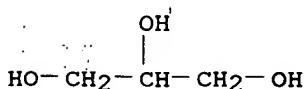
CDES 2:Z

Double bond geometry as shown.



CM 3

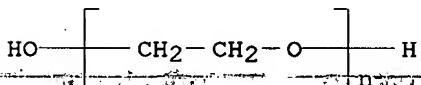
CRN 56-81-5  
CMF C3 H8 O3



RN 55973-44-9 HCAPLUS  
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with  
1,2,3-propanetriol monohexadecanoate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3  
CMF (C2 H4 O)n H2 O  
CCI PMS

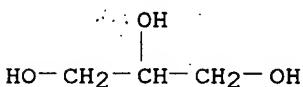


CRN 57-10-3  
CMF 2-43-03

CRN 57-10-3  
CMF C16 H32 O2

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>14</sub>-Me

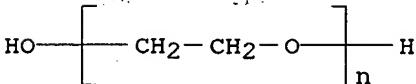
CM 3  
CRN 56-81-5  
CMF C3 H8 O3



RN 99264-60-5 HCAPLUS  
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with  
1,2,3-propanetriol monotetradecanoate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3  
CMF (C2 H4 O)n H2 O  
CCI PMS



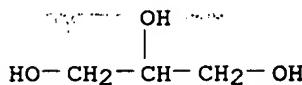
CM 2

CRN 544-63-8  
CMF C14 H28 O2

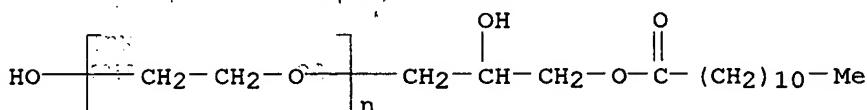
HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>12</sub>—Me

CM 3

CRN 56-81-5  
CMF C3 H8 O3



RN 150372-93-3 HCAPLUS  
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-hydroxy-3-[(1-oxododecyl)oxy]propyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)



L40 ANSWER 38 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1984:573470 HCAPLUS

DN 101:173470

TI Mixture of salts of phosphate esters of polyoxyethylenated partial glycerides of higher fatty acids

IN Ropuszynski, Stanislaw; Perka, Jerzy; Rutkowska, Krystyna

PA Politechnika Wroclawska, Pol.

SO Pol., 4 pp.

CODEN: POXXA7

DT Patent

LA Polish

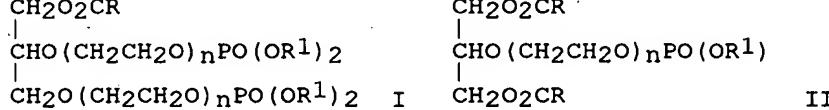
IC C07F009-08; B01F017-14

CC 46-3 (Surface Active Agents and Detergents)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI PL 123434	B2	19821030	PL 1981-229336	19810121

GI



AB The title compds. I and II (R = residue of lauric, stearic, oleic, or erucic acid; R<sup>1</sup> = K, Na, or ethanolamine residue; n = 9-50), useful as surfactants in the textile, cosmetic, and plastic industries, are prep'd. by phosphorylation of partial glycerides of the above fatty acids with polyphosphoric acid (III) contg. 82-84% P<sub>2</sub>O<sub>5</sub> and neutralization of the obtained products with inorg. or org. bases. Thus, 258.0 g III (P<sub>2</sub>O<sub>5</sub> content 82.5%) was added over 15 min to 1133.4 g polyoxyethylated partial glycerides of coconut oil obtained by addn. of 1980.5 g ethylene oxide to

213.8 g partial glycerides and maintained at 343 K. The temp. was raised to 393K and after 2 h the mixt. was cooled and treated (500.0 g) with 0.65 dm<sup>3</sup> 3M methanolic KOH. Removal of MeOH by distn. in vacuo gave a mixt. of salts having acid no. 11.3 mg KOH/g, P content 5.52%, and pH of 1% aq. soln. 7.5.

ST phosphorylated ethoxylated glyceride salt surfactant;  
glyceride ethoxylated phosphorylated surfactant

IT Surfactants

(phosphorylated ethoxylated fatty acid  
mono- and diglycerides, potassium, sodium and ethanolamine  
salts)

IT Glycerides, compounds

RL: USES (Uses)  
(di-, ethoxylated, phosphate esters, potassium, sodium and  
ethanolamine salts, surfactants).

IT Glycerides, compounds

RL: USES (Uses)  
(mono-, ethoxylated, phosphate esters, potassium, sodium and  
ethanolamine salts, surfactants)

IT 25322-68-3D, ethers with fatty acid mono- and  
diglycerides, phosphate esters, potassium, sodium and ethanolamine  
salts 92416-01-8 92471-04-0 92471-06-2

92471-08-4

RL: TEM (Technical or engineered material use); USES (Uses)  
(surfactants)

IT 92416-01-8 92471-04-0 92471-06-2

92471-08-4

RL: TEM (Technical or engineered material use); USES (Uses)  
(surfactants)

RN 92416-01-8 HCAPLUS

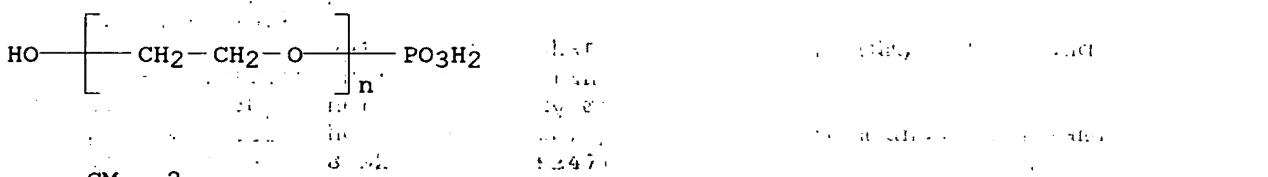
CN Poly(oxy-1,2-ethanediyl), .alpha.-phosphono-.omega.-hydroxy-, ether with  
1,2,3-propanetriol, monoctadecanoate (2:1), tetrapotassium salt (9CI). (CA  
INDEX NAME)

CM 1

CRN 25852-91-9

CMF (C<sub>2</sub>H<sub>4</sub>O)<sub>n</sub>H<sub>3</sub>O<sub>4</sub>P

CCI PMS



CM 2

CRN 57-11-4

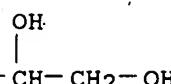
CMF C<sub>18</sub>H<sub>36</sub>O<sub>2</sub>

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>16</sub>—Me

CM 3

CRN 56-81-5

CMF C<sub>3</sub>H<sub>8</sub>O<sub>3</sub>



RN 92471-04-0 HCPLUS

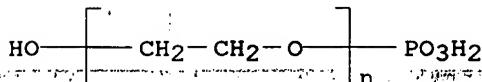
CN Poly(oxy-1,2-ethanediyl), .alpha.-phosphono-.omega.-hydroxy-, ether with 1,2,3-propanetriol dioctadecanoate (1:1), dipotassium salt (9CI) (CA INDEX NAME)

CM 1

CRN 25852-91-9

CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> H<sub>3</sub> O<sub>4</sub> P

CCI PMS



CM 2

CRN 57-11-4

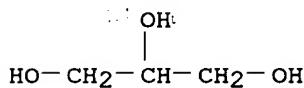
CMF C<sub>18</sub> H<sub>36</sub> O<sub>2</sub>

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>16</sub>—Me

CM 3

CRN 56-81-5

CMF C<sub>3</sub> H<sub>8</sub> O<sub>3</sub>



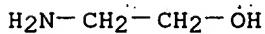
RN 92471-06-2 HCPLUS

CN Ethanol, 2-amino-, compd. with .alpha.-phosphono-.omega.-hydroxypoly(oxy-1,2-ethanediyl) ether with 1,2,3-propanetriol monoctadecanoate (2:1), (4:1) (9CI) (CA INDEX NAME)

CM 1

CRN 141-43-5

CMF C<sub>2</sub> H<sub>7</sub> N O



CM 2

CRN 92471-05-1

CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>21</sub> H<sub>44</sub> O<sub>10</sub> P<sub>2</sub>

CCI IDS, PMS

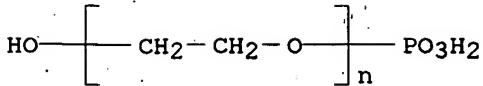
CDES \*

CM 3

CRN 25852-91-9

CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> H<sub>3</sub> O<sub>4</sub> P

CCI PMS



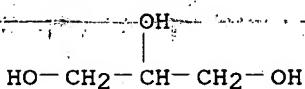
CM 4

CRN 57-11-4  
CMF C18 H36 O2



CM 5

CRN 56-81-5  
CMF C3 H8 O3

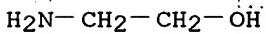


RN 92471-08-4 HCAPLUS

CN Ethanol, 2-amino-, compd. with .alpha.-phosphono-.omega.-hydroxypoly(oxy-1,2-ethanediyl) ether with 1,2,3-propanetriol dioctadecanoate (2:1) (9CI)  
(CA INDEX NAME)

CM 1

CRN 141-43-5  
CMF C2 H7 N O

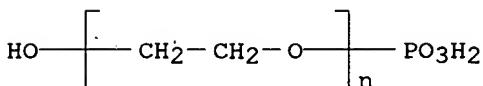


CM 2

CRN 92471-07-3  
CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>39</sub> H<sub>77</sub> O<sub>8</sub> P  
CCI IDS, PMS  
CDES \*

CM 3

CRN 25852-91-9  
CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> H<sub>3</sub> O<sub>4</sub> P  
CCI PMS



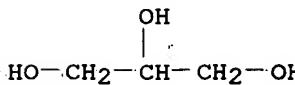
CM 4

CRN 57-11-4  
CMF C18 H36 O2

HO<sub>2</sub>C—(CH<sub>2</sub>)<sub>16</sub>—Me

CM 5

CRN 56-81-5  
CMF C3 H8 O3



L40 ANSWER 39 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1984:123199 HCAPLUS

DN 100:123199

TI Transparent jellylike cleaning agents

PA Shiseido Co., Ltd., Japan

SO Jpn. Tokkyo Koho, 5 pp.

CODEN: JAXXAD

DT Patent

LA Japanese

IC C11D001-825

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 58039198 B4 19830827 JP 1976-62745 19760529

AB Cleaning agents (100 parts) contain higher alc.-ethylene oxide adducts 3-10, fatty acid diethanolamides 5-10, glycerin diesters or dialkyl malates 4-6 parts, and other additives. Thus, coconut oil fatty acid acyl-L-glutamic acid monetriethanolamine 30, lauric acid triethanolamine [89187-80-4] soap 37, and glycerin 13 g were stirred at 70-80.degree., mixed with a heated mixt. of poly(oxyethylene) reduced lanolin 1, coconut fatty acid diethanolamide 7.5, and poly(oxyethylene)lauryl alc. ether [9002-92-0] 5 g, stirred at 70-80.degree., mixed with 5.5 g glycerol di-2-heptylundecanoate [64647-53-6], stirred apprx.20 min, mixed with a color, a perfume, and water to 100 g, and cooled to prep. a transparent jellylike cleaning agent.

ST transparent jellylike cleaning agent; glycerin diester cleaning agent; ethoxylated alc. cleaning agent; fatty diethanolamide cleaning agent; malate dialkyl cleaning agent

IT Soaps

RL: USES (Uses)  
(cleaning agents, contg. ethoxylated alcs. and fatty acid diethanolamide and glycerol diesters, transparent and jellylike)

IT Transparent materials

(cleaning agents, jellylike, contg. ethoxylated alcs. and fatty acid diethanolamides and glycerin diesters)

IT Gels

(cleaning agents, transparent, contg. ethoxylated alcs. and fatty acid diethanolamides and glycerin diesters)

IT Alcohols, compounds

RL: USES (Uses)  
(ethoxylated, cleaning agents contg. fatty acid diethanolamides and glycerin diesters, transparent and jellylike)

IT Detergents

(cleaning compns., contg. ethoxylated alcs. and fatty acid diethanolamides and glycerin diesters, transparent and jellylike)

IT 120-40-1  
 RL: USES (Uses)  
 (cleaning agents, contg. ethoxylated alcs. and dialkyl malates, transparent and jellylike)

IT 63623-64-3 64647-53-6 89187-79-1  
 RL: USES (Uses)  
 (cleaning agents, contg. ethoxylated alcs. and fatty acid diethanolamides, transparent and jellylike)

IT 38732-22-8D, acyl  
 RL: USES (Uses)  
 (cleaning agents, contg. ethoxylated alcs. and fatty acid diethanolamines and glycerin diesters, transparent and jellylike)

IT 111-42-2D, fatty amides  
 RL: USES (Uses)  
 (cleaning agents, contg. ethoxylated alcs. and glycerin diesters, transparent and jellylike)

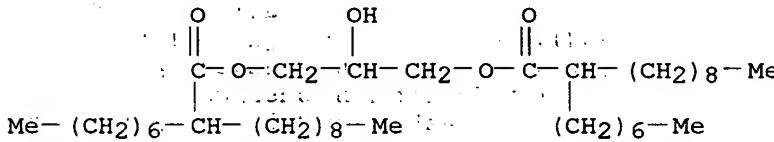
IT 9004-98-2  
 RL: USES (Uses)  
 (cleaning agents, contg. fatty acid diethanolamides and dialkyl malate, transparent and jellylike)

IT 9002-92-0  
 RL: USES (Uses)  
 (cleaning agents, contg. fatty acid diethanolamides and glycerin diesters, transparent and jellylike)

IT 64647-53-6  
 RL: USES (Uses)  
 (cleaning agents, contg. ethoxylated alcs. and fatty acid diethanolamides, transparent and jellylike)

RN 64647-53-6 HCAPLUS

CN Undecanoic acid, 2-heptyl-, 2-hydroxy-1,3-propanediyl ester (9CI) (CA INDEX NAME)



L40 ANSWER 40 OF 42 HCAPLUS COPYRIGHT 2001 ACS  
 AN 1980:131108 HCAPLUS  
 DN 92:131108  
 TI Oxyethylated lipid system containing surface-active compounds  
 IN Widmann, Lutz  
 PA Ger. Dem. Rep.  
 SO Ger. (East), 6 pp.  
 CODEN: GEXXA8  
 DT Patent  
 LA German  
 IC A61K007-48  
 CC 46-4 (Surface Active Agents and Detergents)

Section cross-reference(s): 62, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DD 137784	T	19790926	DD 1977-201390	19771006
AB	The addn. of .gtoreq.3% mixt. of 80-95% coconut fatty acid diethanolamides and 5-20% glycerol [56-81-5] to plant, animal, paraffinic, and/or synthetic oils contg. ethoxylated alcs. (esp. alkylphenols) improves the stability of emulsions prep'd. with the mixts.,				

useful in the manuf. of cosmetics and pharmaceuticals. Thus, a mixt. of ethylhexyl esters of coconut fatty acids 10, paraffin oil 20, neat's-foot oil 25, sunflower oil 25, 85:15 coconut fatty acid diethanolamide-glycerol mixt. 10, C<sub>9</sub>H<sub>19</sub>C<sub>6</sub>H<sub>4</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>4</sub>OH 5, and C<sub>9</sub>H<sub>19</sub>C<sub>6</sub>H<sub>4</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>8-9</sub>OH 2 parts dispersed rapidly in water to give stable emulsions.

ST emulsifier nonionic oil; amide hydroxyethyl emulsifier; glycerol emulsifier oil; ethanolamide emulsifier oil

IT Paraffin oils

Rape oil

Sunflower oil

RL: USES (Uses)  
(emulsifiers for)

IT Emulsifying agents  
(surfactants-glycerol, for oils)

IT Amides, uses and miscellaneous  
RL: TEM (Technical or engineered material use); USES (Uses)  
(fatty, N,N-bis(hydroxyethyl), emulsifiers, for oils)

IT Oils  
(neats-foot, emulsifiers for)

IT Oils  
RL: USES (Uses)  
(sesame, emulsifiers for)

IT 110-27-0 3687-45-4 5333-42-6  
RL: USES (Uses)  
(emulsifiers for)

IT 56-81-5, uses and miscellaneous, 111-42-2D, amides with coconut fatty acids 9004-98-2, 9016-45-9, 9036-19-5.  
RL: TEM (Technical or engineered material use); USES (Uses)  
(emulsifiers, for oils)

IT 56-81-5, uses and miscellaneous.  
RL: TEM (Technical or engineered material use); USES (Uses)  
(emulsifiers, for oils)

RN 56-81-5 HCPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



L40 ANSWER 41 OF 42 HCPLUS COPYRIGHT 2001 ACS  
 AN 1977:92256 HCPLUS  
 DN 86:92256  
 TI Monoglyceride polyoxyalkylene ether sulfates  
 IN Nakase, Toshiaki; Hidaka, Toru  
 PA Riken Vitamin Oil Co., Ltd., Japan  
 SO Japan, Kokai, 6 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC C07C141-08  
 CC 46-3 (Surface Active Agents and Detergents)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 51128912	A2	19761110	JP 1975-52521	19750502
		JP 58033867	B4	19830722

AB The ether sulfates had good detergency and did not irritate the skin. Thus, glycerol monolaurate was treated with 7 mol ethylene oxide [75-21-8], sulfated with ClSO<sub>3</sub>H, and neutralized with aq. NaOH to prep. a detergent. Hardened coconut or palm oil fatty acid monoglyceride was also used as a starting material.

ST monoglyceride ethoxylate sulfate detergent;  
glyceride mono ethoxylate sulfate

## IT Detergents

(sulfates of ethoxylated monoglycerides, with skin compatibility)

## IT Glycerides, uses and miscellaneous

RL: USES (Uses)

(mono-, alkylated, sulfates, as detergents with skin compatibility)

## IT 75-21-8D, reaction products with fatty acid monoglycerides, sulfates, salts 61987-21-1

RL: USES (Uses)

(detergents, with skin compatibility)

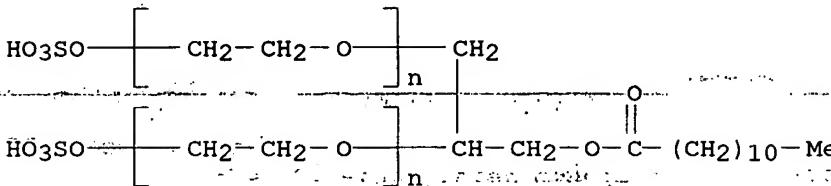
## IT 61987-21-1

RL: USES (Uses)

(detergents, with skin compatibility)

## RN 61987-21-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[1-[(1-oxododecyl)oxy]methyl]-1,2-ethanediyl]bis[.omega.-(sulfoxy)-, disodium salt (9CI) (CA INDEX NAME)



## ●2. Na

L40 ANSWER 42 OF 42 HCAPLUS COPYRIGHT 2001 ACS

AN 1976:496124 HCAPLUS

DN 85:96124

TI Non gelling, readily dispersible surfactant

IN Ishisato, Sukemasa; Imai, Shoichi

PA Riken Vitamin Oil Co., Ltd., Japan

SO Japan., 4 pp.

CODEN: JAXXAD

DT Patent

LA Japanese

IC C09K003-00

CC 46-4 (Surface Active Agents and Detergents)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 51011076 B4 19760408 JP 1970-68559 19700805

AB To prepare the surfactant, a molten mixt. of fatty acid monoesters of glycerol [56-81-5] 40-70, fatty acid monoesters of propylene glycol [57-55-6] 40-70, and hydrophilic surfactant selected from fatty acid esters of poly(oxyethylene) sorbitan [12441-09-7] and ethoxylated glycerol and metal salts of fatty acids &lt;10 parts was atomized to give a fine powder. The surfactant swelled and dispersed in water at &lt;30.degree. and did not gel at high temps. The surfactant was useful in foods, medicines, paints, etc.

ST surfactant ethoxylated alc mixt; polyoxyethylene deriv mixt surfactant

## IT Surfactants

(mixtures, nongelling, contg. fatty acid monoesters of glycerol and propylene glycol)

IT 1,2,3-Propanetriol, monoesters with fatty acids

1,2-Propanediol, monoesters with fatty acids

Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''1,2,3-

propanetriyltris[.omega.-hydroxy-, esters with **fatty acids**  
Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ethers with sorbitan esters  
Sorbitan, éthoxylated, esters with **fatty acids**  
RL: USES (Uses)  
(surfactant mixtures contg.)